DECEMBER 1955 • Volume XIV, No. 4

Journal of THE SOCIETY OF ARCHITECTURAL HISTORIANS

CONTENTS

The JOURNAL *of the Society of Architectural Historians is published in March, May, October and December. Manuscripts, news and notes are welcome and should be sent to the Editor of the SAH* JOURNAL, *University of Virginia Graduate School of Business Administration, Charlottesville, Virginia. Printed in Crawfordsville, Indiana, by R. R. Donnelley & Sons Company, The Lakeside Press. The* JOURNAL *is listed in the Art Index.*

COLONIAL TOWNS OF SPANISH AND PORTUGUESE AMERICA

ROBERT C. SMITH

IN THE TWO centuries between 1500 and 1700 six European nations established towns and colonies in the Americas. Of these only Spain laid out towns according to a regular and unvarying plan. This plan represented an orderly practical concept without precedent in the immediate background of Europe. It involved not only the careful consideration of the site from the standpoint of terrain and climate but also the introduction of a gridiron plan of broad straight streets intersecting one another at right angles to form rectangular blocks and open squares. The plan was the result of a number of royal orders first codified in 1523 at the time of the conquest of Mexico and incorporated in what are known as the Laws of the Indies, which were followed in all subsequent Spanish colonization until the end of the colonial period.[1]

The gridiron plan, used in Mesopotamia and in ancient Egyptian cities, had been the standard scheme for plotting Graeco-Roman cities. It was almost entirely abandoned, however, in medieval times in favor of an irregular system of crooked streets and uneven spaces that obeyed a very different kind of planning. The revival of the gridiron in Spanish America was, therefore, a revival of a commonplace of antiquity and as such is characteristic of the Renaissance. It was also one of the outstanding American contributions to the history of urbanism because the revival of the gridiron plan took place in the new world before it became accepted in Europe.

Before the conquest of Mexico one important urban site had been laid out in Spanish America. This was the town of Santo Domingo on Columbus' island of Hispaniola, the modern Ciudad Trujillo, capital of the Dominican Republic, which was founded in 1496. King Ferdinand, writing to his military governor Nicolás de Ovando, said that "from here it is not possible to give precise instructions" and left to the governor himself the responsibility of determining the plan to be followed.[2] The one that was adopted on the spot is, however, related to the whole subsequent development because it includes a number of regular arteries running parallel from a principal square containing the cathedral and city hall and a number of less regular open spaces with their respective churches.[3] The result was sufficiently impressive to lead the Italian bishop Geraldini upon his arrival at Santo Domingo in 1520 to commend the streets as broader and straighter than those of his native Florence.[4] In contriving this plan it is probable that the soldier Ovando and his associates were less concerned with the theory of an ideal city than with the recollection of a hastily contrived but efficiently laid-out military camp which some of them had known. This was the temporary castrum of Santa Fé, which Ferdinand and Isabella had created in two and one-half months in 1491 in order to launch the successful siege of Granada which drove the last Moors from Spain. Santa Fé was drawn up as a fortified rectangle intersected by the crossing of two perpendicular axes and approached by four cardinal gates. Santo Domingo was provided with walls for defence from marauders approaching by sea and was thus the forerunner of all the subsequent heavily fortified Spanish strongholds of the Antilles and the Gulf of Mexico.

In 1520 Hernando Cortés took the Aztec capital of Tenochtitlan and completed the conquest of Mexico, which now became New Spain. Almost at once it was decided to rebuild the city, devastated by the terrible campaign, upon the same site; thus was laid the groundwork for the modern City of Mexico. The Spanish surveyor Alonso García Bravo was employed in 1524 to draw up the plan.[5] This was the first example of the gridiron scheme, the use of which was by now specifically required by law, having been already suggested in the royal instructions to Pedrarias Dávila on the occasion of his first expedition to the mainland in 1513.[6] Fourteen streets intersecting each other at right angles were laid out around a central Plaza Mayor, which was to contain the cathedral and the residence of the governor. This was in reality the center of the old Aztec city, as is shown by a woodcut map published with a letter from Cortés at Nuremberg in 1524.[7] It was there that the principal temples and palaces had been located, approached by broad thoroughfares in four directions like those in other Indian towns described by the Spanish friar Motolinia, who called attention to "the large square court in the best part of the town" and "the very straight highways"

ROBERT C. SMITH *is a member of the Department of the History of Art, University of Pennsylvania, and of the Winterthur Program in Early American Culture of the University of Delaware.*

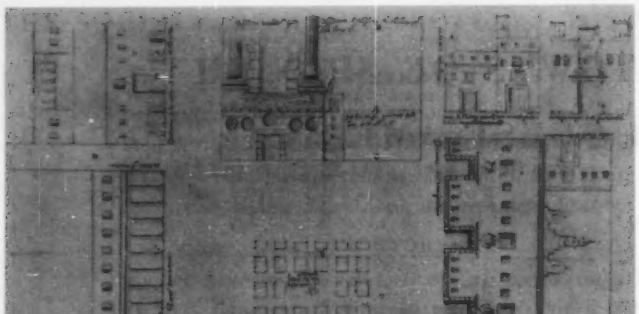


FIG. 1. Mexico City. The main plaza in 1596. (After Diego Angulo, *Planos del Archive de Indias*, atlas, I)

that led to it. In this respect the new Spanish urbanism followed an Aztec tradition but there is no proof that the Indians knew or used the full gridiron arrangement.

In devising their plan the Spaniards were obeying the trend established by Italian humanists of the 15th century, who revived in theory, if not in fact, the orderly layout of classical cities, for none of their designs were actually carried out. Men like Alberti and Filarete based their plans for ideal cities upon the monumental concept they obtained from reading the text of Vitruvius, the chief original written source for information on Graeco-Roman architecture. From him they developed their taste for broad squares, stately colonnades and straight thoroughfares, but they used these features on a radial rather than a gridiron basis, apparently because Vitruvius was not sufficiently specific in describing the street pattern of his city and because the radial system was common in the middle ages. Thus none of the town plans of the Italian humanists which came to be known in Spain by the early years of the 16th century can be considered precise models for the master plan of the Laws of the Indies. Some other explanation of the origin of the Spanish gridiron must, therefore, be sought. It may have come from a new interpretation of Vitruvius on ancient urbanism; it may have been derived (but this is improbable) from the Roman towns of Spain; or again it may have evolved from the camp at Santa Fé, which in turn may have been influenced by the only real gridiron plans of the middle ages, which occur at Montpazier, Mirande and other 13th-century *bastides* of Southern France.[8] Whatever its origin, the plan in Spanish America was effectively combined with the monumental classical concept of the city advanced by the humanists of Italy. The dialogue of Cervantes de Salazar, published in 1554 after the rebuilding of Mexico City, proves beyond question that the fine streets with regular façades joining handsome symmetrical squares, which were so highly praised by foreign visitors of the period, were accepted in New Spain as an essential part of the Italian understanding of urbanism based on Vitruvius. At the same time, however, this concept bore no practical fruit in Old Spain, where even in Philip II's new capital of Madrid the whole 16th century passed without an end being put to the irregularities and crowding of medieval construction. It was not, in fact, until 1617 that the building of the Plaza Mayor gave Madrid a large symmetrical square handsomely adorned in the fashion of the broad open spaces of Mexico and the other urban centers of Spanish America.[9]

The 16th-century appearance of the City of Mexico, the greatest metropolis of the Americas, is represented in a number of documents, one of the most interesting of which is a drawing of 1596 in the Archivo de Indias at Seville (Fig. 1). In the center was the main plaza, according to the rule imposed by the Laws of the Indies for inland cities. One side was occupied by the cathedral which was in course of construction from 1563 to 1665. Adjacent to it at the east rose the palace of Cortés which took the place of that of Montezuma. The other two sides were filled with buildings having ground-story colonnades, the *portales* of the merchants. These were required on Vitruvian precedent by the Laws "because of the great convenience that they offer to the merchants who gather here" as a protection against sun, wind and rain. They have long since disappeared in Mexico City but in some remote places they have survived. At Cuzco in the mountainous interior of Peru they took the form of arcades and are thus closely related to the design of cloisters and the patios of some of

the early houses. At the four angles of the main plaza of Mexico City appear the eight broad streets that were specified in the Laws and which were not "to have colonnades that would block their juncture with the plaza." Maps of the early 17th century show the development of the rest of the gridiron by means of the same straight streets that lead to minor squares with churches and colonnaded markets, repeated on a constantly expanding scale. The arrangement appears more clearly in a pictorial map of Cholula, another Mexican town erected on an Indian site, which dates from 1580.[10] Here each parish church is identified and the regularly disposed blocks of houses are faithfully represented as equal in size, each one having been originally subdivided into the lots or *solares* 150 feet square, which were allotted to the first settlers. The streets measure 14 *varas* or approximately 39 feet in width.

Neither Mexico City, Cholula nor any of the inland towns except Lima in Peru was fortified with walls and towers of defence as were those on the seacoast. It was customary, however, in the 16th century for large houses to have some form of protection from enemies within the city. Likewise, the members of the religious orders who founded their rural convents all over Mexico in the 16th century took the precaution of fortifying their churches with towers of defence, buttresses and battlements. The resulting buildings resemble the fortified churches which continued to be erected after the Albigensian heresy in unwalled towns of southern France. A 1580 map of Huejutla in the state of Hidalgo shows the regular streets intersecting at right angles that were provided for the Indian villages constructed by Spaniards adjacent to the convents and their churches.[11] These village plans in imitation of the gridirons of the cities gave impressive vistas to modest settings, not only in Mexico but all over Spanish America.

The same laws of town planning were applied in every part of the Indies during the 16th century, the crucial period for the laying out of towns in the Spanish domains of the New World. From Bogotá, founded in 1538, to Santiago de Chile, a town created in 1541, and La Paz in Bolivia of 1548, the regular scheme of the gridiron was repeated all over Spanish South America, following the precedents already created in Mexico. In the Laws of the Indies the founders were cautioned against selecting sites that were either too high or too low for the good health of the inhabitants or of such irregular terrain as to interfere with the proper use of the gridiron plan. At Lima in 1535 Pizarro and his companions chose a site that was practically ideal since the ground was almost completely level. The level site is characteristic of Popayán in Colombia, Puebla in Mexico, Antigua in Guatemala and indeed of almost all the early centers of the Spanish colonies. Exceptions like Quito in Ecuador do exist, where the whole city is spread out on a hillside, but that is because of the decision made in 1534, at the time the old Inca settlement was captured, to establish the new town on the old site.

After the site was chosen, the Laws directed that the preexistent plan be laid out *a cordel y regla*, with rigorous exactitude. The first concern was the location of the principal square, "symmetrical, harmonious and monumental," as George Kubler has called it, so that "the four corners of the plaza face to the four principal winds, because in this way the streets leaving the plaza are not exposed to the principal winds, which would be of great inconvenience." In this respect (and there are others) the Laws of the Indies follow instructions laid down long before by Vitruvius. For the plaza mayor the Laws recommended an ideal size of six hundred by four hundred feet so that it would be big enough for the *fiestas de caballos*, the traditional equestrian sports of Spain. In inland towns the principal square was to be in the center of the city and in port settlements at the water's edge. This, for example, is still the disposition of Buenos Aires, where the city is focused upon the Plaza de Mayo, which was laid out on the waterfront at the time of the refounding of the old town in 1580.[12]

The principal square is almost invariably dominated by the metropolitan church, generally in large centers a cathedral, "raised up somewhat," according to the Laws of the Indies, so that it can be seen advantageously, as Vitruvius had recommended for the chief temples of Roman cities. In regard to the location of these buildings there is what seems to be a discrepancy between the codified instructions and the actual practice because the Laws specifically direct that the cathedral was to be erected not in the principal square but in "some separate and prominent place." Perhaps the explanation of this confusing expression is that the Laws were forbidding the construction of the cathedral *inside the periphery of the square*, as was often the custom in the Middle Ages, a custom which it is important to note was still followed at Santo Domingo where the cathedral occupies a position within the principal plaza. In contra-distinction, the "separate place" of the Laws probably meant the side of the square, where churches, following the laying-out of Mexico City, were invariably placed. Some cathedrals, like those of Mexico City, Quito and Bogotá, have free-standing churches called Sagrarios Metropolitanos at their sides for the performing of parochial ceremonies. At Tunja in Colombia there is another great ensemble of colonial architecture, for the cathedral stands beside the old Atarazana, the municipal arsenal and storehouse, which was also required to be installed in the plaza mayor by the Laws of the Indies, along with the city hall.

The long straight streets of the gridiron plan, which so greatly impressed the first English visitors to New Spain, were solidly lined with contiguous houses. Usually of but one story, especially in the earthquake areas of Peru and

Central America, the typical house was arranged in the Spanish and Moorish fashion around a patio. Shops were frequently installed in the front part of the house and also at street corners, where an angle column denotes their presence. In large two-story houses like that of the Marquis of San Jorge at Bogotá it was by no means unusual, following Iberian custom, for a part or all of the ground story to be used for commerce. In a few great houses like the former mansion of the Marquis of Torre Tagle in Lima, which seems to date from about 1735, there are two interior courtyards: first one for family living, containing the great stair leading to the principal apartments on the second floor, and then one for service, around which were installed the kitchens, stables and other necessary places.

Colonial Paraguay comprised an immense territory including modern Paraguay, almost all of Argentina, as well as part of Brazil, Bolivia and Chile. It was here that Jesuit missionaries, arriving from Peru in 1587, set up the famous República, which endured until the expulsion of their order from all the territories of Spain in 1767. To convert the Indians they established towns or *reducciones*, as the missionary friars in Mexico had already done, but because of the absence in this distant colony of regular civil organizations, these towns of the Jesuit missionaries were the only settlements in the area. Constructed and maintained by communal labor and containing sometimes as many as 7000 inhabitants, the *reducciones* all reflected in miniature the gridiron plan. Now, unfortunately, the Jesuit missions of Paraguay have almost entirely disappeared. They can, however, be partly reconstructed through the engraving representing that of Candelaria, considered a model for others, which was published by Father José Manuel Peramás in 1793 (Fig. 2). In the center was the single great square, each side of which measured some four hundred feet. Around it were grouped long rectangular houses called *galpones* occupying blocks some ninety feet in length, which were divided by broad streets. All these houses had covered porches or porticoes which produced a continuous peristyle around the entire block.

Facing the square, which contained a statue of the Virgin upon a column, was the mission church. At its right were located the cemetery and a large building for widows and orphaned girls. On the other side was the residence of the two Jesuit priests who directed the mission, constructed in characteristic fashion around a patio, and beside it, occupying identical space, another court with warehouses and workshops, like the Atarazanas that stood beside metropolitan churches in the civil towns.

There is reason to believe that the Portuguese Jesuits, who first reached Brazil in 1549 and there became a great colonizing force, founding as they did four hundred years ago the present city of S. Paulo, used a not dissimilar plan for their *aldeias* or Indian estates. These were all, however, much smaller than the missions in Paraguay and almost nothing is known about the details of their arrangement. A drawing of 1793 (Fig. 3), in the colonial archive of Lisbon representing the nucleus of the mission at Espírito Santo in the state of Bahia shows the church and Jesuit residence at the head of the same broad square found in the Paraguayan missions.[13] But the way in which the houses are located unevenly around this square and the diagonal streets leading off from its angles represent a departure from the gridiron plan.

That plan in fact was not a characteristic of the colonial

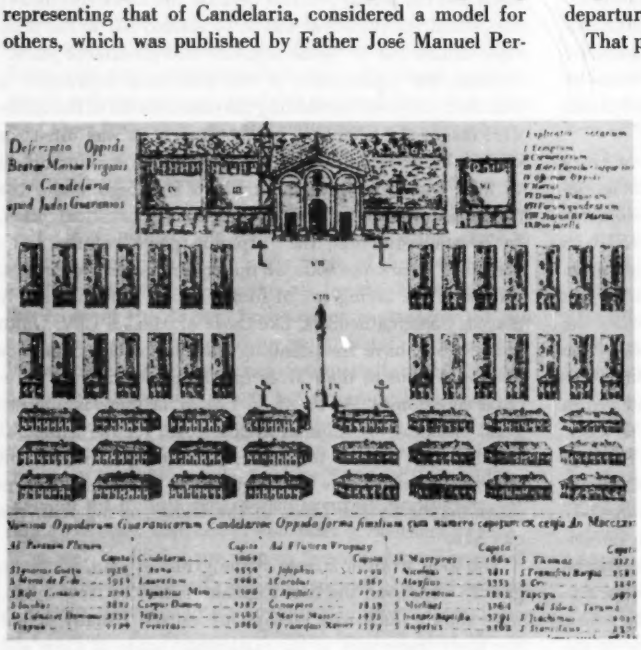


FIG. 2. Mission of Candelaria, Paraguay. (Engraving from J. M. Peramás, S. J., *De administratione guaranica*, Faventiae, 1793)

settlements of Brazil. At no time did the Portuguese, who discovered the country in 1500 and held it until 1822, provide a code of rules for urban development. Their cities grew without being planned in a kind of picturesque confusion that is as typical of Luso-Brazilian cities as order and clarity are typical of the urbanism of Spanish America.[14] Lisbon itself served as a model which was followed in various degrees of exactitude in different sites all over the Portuguese empire. That city, one of the most beautiful in Europe, is constructed upon a series of steep hills overlooking the broad expanse of the estuary of the Tagus River. The tops of these hills have been from an early time occupied by churches and convents, isolated in height and extremely difficult of access. Around them wind narrow, twisting streets and lanes, so sharply inclined that they have always presented a serious barrier to vehicular traffic. Nowhere in Europe, as a result, were litters and sedan chairs more frequently utilized than at Lisbon and Oporto, another city built in a quite similar fashion. Far below, at the port level, is the business center, constituting a lower city quite separate from the upper town. In this lower area of Lisbon the old streets were almost as narrow and irregular as those of the zone above until in 1755 an earthquake of major proportions opened the way to a great rebuilding. Then the architects of the prime minister Marquis of Pombal imposed the gridiron plan with two great squares connected by parallel streets regularly intersecting. The waterfront square, known as the Terreiro do Paco because it originally contained a royal palace, with its handsome administrative buildings designed with continuous façades and its bronze equestrian statue of Joseph I (by Joaquim, Machado de Castro) is one of the outstanding monuments of the 18th century in Europe. A plan for a similar waterfront square in Oporto, the Praça da Ribeira, was made in the late 18th century by the British consul, John Whitehead, an amateur architect of distinction, but was never carried out.[15]

The pattern of a city at two or more levels sprawling in disordered strip formation was repeated in the Portuguese colonies almost wherever the terrain permitted. S. Paulo de Luanda in West Africa and Macau in southern China were built in this fashion and unfavorably impressed the travelers of the time. Thomas Herbert in 1638 found the streets of Old Goa in Portuguese India "narrow and nasty"[16] and the contemporary *Voyage of John Hughen van Linschoten* relates that "the towne lyeth uppon some hills and dales like Lisbon."[17] This compares with Domingo Fernández Navarrete's account of Macau, where "there are ascents and descents, hills and dales and all rocks and sand,"[18] and the remarks of the New England diarist, Harriet Low, in 1829 that "the streets [of Macau] are intolerable, hilly, irregular and horribly paved."[19] At times even the Lisbonese themselves, returning from their foreign travels, viewed with distaste the plan of their native city. Thus the secretary of Father Corrêa da Serra, the first Portuguese Minister Plenipotentiary in Washington, in a letter to a Philadelphia friend in 1822 observed of Lisbon:

> What a terrible place it is! . . . These people here . . . seem to have no kind of idea of what is comfort and ease. They built their capital city on three hills, so steep and so sharp that it literally requires goat's feet and humour to be able to walk in Lisbon.[20]

In following this uncomfortable system of planning the Portuguese settlers seem at least in part to have been obeying the medieval concept of defence through height. Another location which recommended itself for purposes of protection was the island city and this was utilized at Goa and Dio in India and at Moçambique (Fig. 4) and Luanda

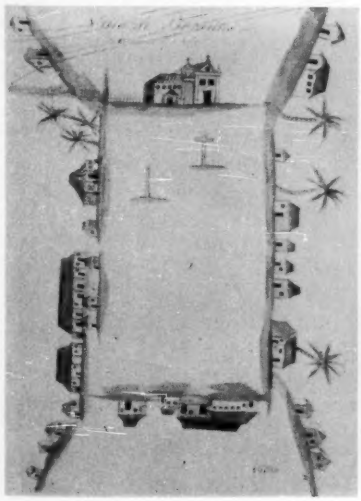
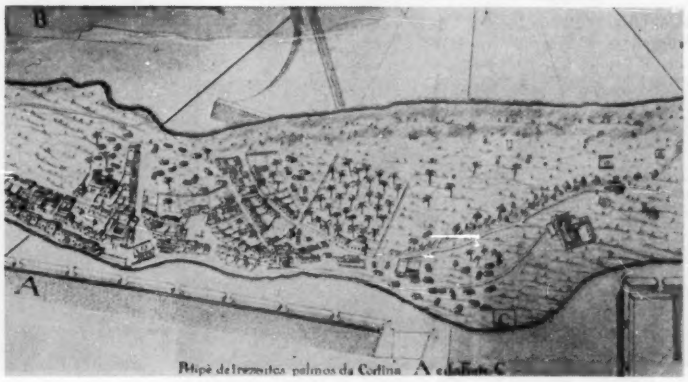


FIG. 3. (Left) Espírito Santo (now Abrantes), Bahia, Brazil. The Jesuit Mission in 1793. (From a drawing in the Arquivo Histórico Ultramarino, Lisbon)

FIG. 4. (Below) Moçambique, Portuguese East Africa. (From an 18th-century map by Gregórigo Taumaturgo de Brito, Arquivo Histórico Ultramarino, Lisbon)



in Africa. Both situations are found in colonial Brazil, where almost all the early settlements were made directly on the seacoast, in contrast to those of the Spanish, who in their territories preferred inland locations for their capital establishments.

Salvador in the captaincy of Bahia, which remained from its foundation in 1549 until 1763 the colonial capital of Brazil, is the closest approximation in the new world to the site and plan of Lisbon. At Salvador the administrative buildings as well as most of the major churches and great houses were built in the upper city, superbly overlooking the vast expanse of the Bay of All Saints and enjoying at intervals a cooling breeze from the sea. Commerce and shipping, on the other hand, took up the lower level. Here was a network of lofty tenements on narrow streets, broken by dark passageways and stuffy courts, that probably represented the most faithful reproduction in colonial America of the complexities of medieval conglomerate housing in Europe. The extraordinary watercolor at the Museu do Estado da Bahia showing the now demolished Morgado de Sta. Bárbara (Fig. 5), expresses better than any verbal description the confusion of the port zone as it was described at the end of the 18th century by the Portuguese schoolmaster, Luiz dos Santos Vilhena.[21] "Not only are these people jealous of the land they occupy," he wrote, "but also of the very air, because not satisfied with building houses like cages in four or five stories, they set them so close that from the upper floors the street can scarcely be seen . . . and the streets are extremely dark and disagreeable for those who walk upon them."[22] These remarks resemble those of William Bromley, an English traveler who wrote from Lisbon in 1694 that "the Houses are generally high and the streets so narrow, that the sun comes little into them . . ."[23] The Sta. Bárbara watercolor shows also the wooden shutters and balconies with tiny roofs which Vilhena noted, as well as some of the stone doorways with coats of arms and doors of deeply set paneling characteristic of Portuguese Renaissance building.

Steep ramps, which are still in use, and cranes and other kinds of hoists were built to join the two levels of Salvador. These can be seen in several 18th-century panoramas, including the one signed in 1758 by the Bahian engineer, José Antônio Caldas.[24] In the upper city an effort was made to regularize the major streets of the central area, some of which run parallel with more or less regular intersections at right angles, their width varying from 9′ 7″ to 15′ 5″. But the squares remain long, narrow and uneven openings, like the *terreiros* of the middle ages in Portugal, that sometimes are located diagonally to the streets. Vilhena criticized them for their meanness and their lack of symmetry and, passing to the city as a whole, he condemned its site. "It is a pity," he wrote, "that the founders chose to seat their city on a ridge so steep and full of humps and dips that it scarce can be approached by land, when they had at their disposal what is perhaps one of the noblest locations in the world."[25] He seems to have had in mind either the relatively flat area on the coast or, as a characteristically Lusitanian solution, one of the islands in the bay. For the same reasons shortly thereafter the Portuguese exile, Raimundo José de Sousa Gaioso attacked the hilly site of S. Luiz do Maranhão in northern Brazil, because the irregularity of the terrain destroyed the beauty of its buildings.[26]

The founders of S. Paulo likewise chose a difficult location for the same motives of defense,[27] while at Rio de Janeiro, established in 1567, the almost fantastic land formations impeded the development of the city, which at the beginning was pretty well confined, like some medieval hill town of Italy, to the summit of the Morro do Castelo. Thus Frei Agostinho de Sta. Maria wrote in 1714: "The

FIG. 5. (Below) Salvador, Bahia, Brazil. The Morgado de Sta. Bárbara. (From an 18th-century watercolor in the Museu do Estado, Salvador)

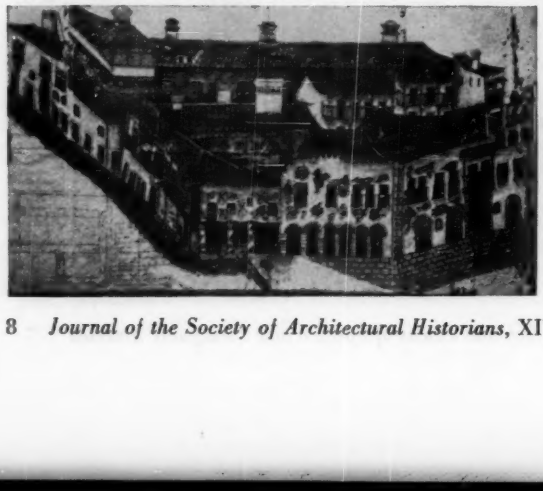


FIG. 6. (Right) Rio de Janeiro. The Rua Direita and Palace Square. (From the J. R. Fragoso map, 1874)

first foundations of this City were on a hill, where still can be seen the Cathedral, the Jesuit College, the fort of St. Sebastian and some old houses of the first colonists; but with the development of commerce the site became too small for new constructions and the new inhabitants began to build their houses . . . along the shore." But then he added "the City is still thrust between two mountain peaks that occupy the ends of the shoreline." [28]

Here in the lower city which rapidly became the real city of Rio de Janeiro, there grew up the same irregular network of streets and passageways as at Salvador and Recife, some of which, like the Rua Gonçalves Dias, were so narrow that they have now been closed to vehicular traffic. Between the cone-like hills still occupied in true Portuguese fashion by the Franciscans and Benedictines ran the principal artery which like the main thoroughfare of Salvador was "so narrow and formless, with so many salient and re-entrant angles, that a carriage could scarcely move along it." [29] This was surprisingly named the Rua Direita or Straight Street, following a custom long used in Portugal which is comparable to the English tradition of calling the principal thoroughfare of a town the High Street. In fairness to this Portuguese custom, however, it should be noted that in old maps and documents the words "Rua Direita" are generally followed by some such expression as "que vai da Cadêa para a Ponte" (Running from the Prison to the Bridge) indicating that the term was used to mean that the street ran not in a straight line but continuously between two given landmarks. Thus, neither at Rio de Janeiro nor elsewhere was there a system of broad thoroughfares running straight and parallel like the ones that distinguish almost every colonial urban center of Spanish America.

In the center of the new town of Rio de Janeiro, which grew up in the 17th century, is the waterfront Praça do Palácio, where the position of the governor's residence corresponded to that of the old royal palace in the similar square in Lisbon and the fountain of Maria I to the equestrian statue of her father, King Joseph (Fig. 6). There is an almost identical waterside square at Luanda in Portuguese West Africa, containing the governor's palace and an obelisk erected in honor of John VI's acclamation in 1816. Both colonial squares were evidently created in reminiscence of the majestic Terreiro do Paço in Lisbon and it is significant that the one monumental expression in the early town planning of these two cities of the Portuguese empire symbolizes one of the noblest aspects of their traditional civilization—the Lusitanian conquest of the seas.

To understand the complete variety in the laying-out of streets in typical Brazilian colonial towns, we can consider the formation of two small but characteristic sites: Cachoeira and Ouro Preto. Cachoeira, a 17th-century settlement in Bahia, is represented in a pictorial plan of 1792 contained in a manuscript of the local judge Joaquim Amorim de Castro, now in the Arents collection at the New York Public Library (Fig. 7). The town is situated on both sides of the River Paraguassú in the center of a rich sugar and tobacco area near Salvador and in the 18th century enjoyed considerable prominence because of its location at the end of the land route from the gold country of Minas Gerais.

The plan of the main section consists of a series of long narrow open spaces that correspond to the even rectangular plazas of the Spanish American towns. Adjacent to the waterfront, at the end of one of these *terreiros*, as they were called in both Portugal and Brazil, stands the *pelourinho*,

Fig. 7. Cachoeira, Bahia, Brazil. Pictorial map of 1792. (Watercolor from a manuscript of Joaquim Amorim de Castro. Arents Collection, New York Public Library)

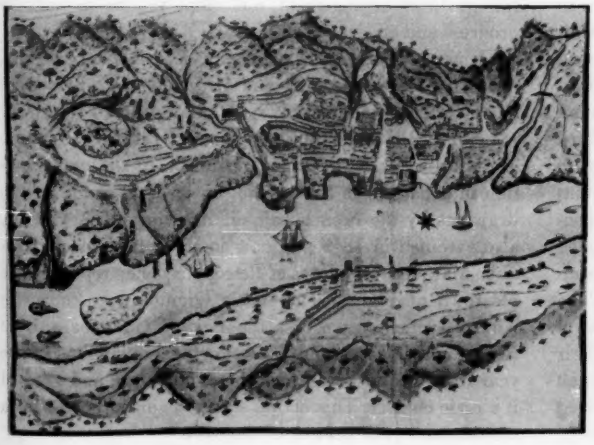
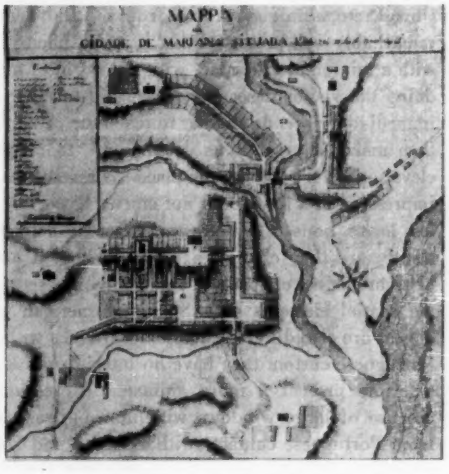


Fig. 8. Mariana, Minas Gerais, Brazil. The new quarter of 1745. (From an 18th-century map in the Arquivo Militar, Rio de Janeiro)



or post of royal justice, a monument symbolizing the recognition of the town by Portuguese authority, which in the colonial period was found in every chartered town. In the center of another *terreiro*, and thus in direct opposition to the custom prevailing in Spanish America, rises the parish church of N. S. do Rosário. Beside a third, which is oriented in a contrary direction, are located the buildings of the Carmelite order in Cachoeira. Around these uneven places twist and wind the curving streets, almost without semblance of preconceived plan. There is a relationship between these radial elements and the plans of many medieval towns in Portugal, France and Spain but there is absolutely no connection with the gridiron plan. On the contrary, the same arrangement, or rather lack of arrangement, can be seen in the topographic map of the Portuguese military engineer, Gregório Taumaturgo de Brito, representing Moçambique in the second half of the 18th century (Fig. 4), which could easily be mistaken for some colonial town in Brazil and, were it larger, for Cachoeira itself.

Ouro Preto, the old capital of the state of Minas Gerais, was founded in 1711 for purposes of trade in a rich gold-mining region west of Rio. The tortuous nature of the plan here is even more apparent.[30] The central square is again long and narrow and not entirely regular and this time it actually curves as it dips in the middle between the old governor's palace and the fine 18th-century town hall. Here there is no church because the Portuguese sometimes preferred to place their religious edifices at a short distance from the principal square. The streets, of widely varying width, curve in capricious conformance to the rugged and eccentric topography of the site on which the town is erected. In reality there is but a single principal thoroughfare, which in its meandering connects widely separated nuclei of settlement, representing the early *arraiais* or trading posts and the primitive chapels later replaced by the two parish churches and those of the Third Orders, which played an important part in the social life of the town. Ouro Preto, a unique survival from the 18th century, is so remarkably well preserved that it is possible to traverse it with a minimum of contact with the world of today. In so doing the visitor descends a steep hill to enter the town, immediately ascends another to reach the principal square, then makes a precipitous decline only to mount a third elevation before leaving the place. As a result he forms an impression of a town built not on two levels but on countless levels, none of which can be exactly defined, so constantly are they changing. There is here a complicated prismatic effect of space, dramatically opposed to the simple spatial elements of a Spanish American town. The houses are also different, for in accordance with a general Portuguese custom they have no interior patios and their exteriors present a more animated expression through the use of large windows with movable sashes, derived from Portuguese contacts with England and Holland.

Although Luso-Brazilian urbanism represents in general the survival of medieval irregularities and the strip system of planning into the baroque age of the 17th and 18th centuries, some efforts in the direction of more compact and regular formations were made in colonial Brazil. The earliest seems to have occurred at Recife, the capital of Pernambuco, a zone of sugar plantations in the northern part of the country. The wealth of this area attracted the attention of the Dutch West Indies Company, which had little trouble in seizing it in 1630, for the Portuguese settlers had relied for defence upon hills rather than upon cannon and men. Between then and the year of their expulsion, 1654, the Dutch built the new port city of Recife upon an island between two rivers in an undertaking which presents the most interesting parallels with their contemporary development of Nieuw Amsterdam on the Island of Manhattan in North America. Here at Recife were constructed the same Dutch houses with gabled façades facing the streets but with tropical galleries, slave quarters and palm gardens. At the north end of the island the Dutch governor Count John Maurice of Nassau-Siegen erected his palace of Vrijburg, the most monumental structure of the time in Brazil and surrounded it with a group of evenly aligned squares and gardens that constitute the first instance of regular planning on a large scale in the country.[31] But this was the work of a foreign invader. It is significant that no further developments took place until the middle of the 18th century. Then at the episcopal city of Mariana near Ouro Preto in Minas Gerais the military engineer José Fernandes Pinto Alpoim was employed in 1745 to construct a new quarter with straight streets intersecting at right angles (Fig. 8). This seems to be the earliest example of the Portuguese use of the gridiron in Brazil. It certainly ante-dates the appearance of the form in Portugal in the rebuilding of Lisbon after the earthquake of 1755 and the laying out of the new model town of Vila Real de Sto. Antônio on the Guadiana River in 1774 by order of Pombal, where the full gridiron arrangement was employed as a mark of progress and efficiency.[32]

Elements of the same plan appear in all the Brazilian towns founded at the very end of the colonial period, for one of which, Linhares in Espírito Santo, there is a drawing dated 1819 in the Biblioteca Nacional at Rio de Janeiro. The most extraordinary demonstration of the new direction in urbanism in this period, however, is found in two drawings by the French painter, Armand Julien Pallière, also executed in 1819 and now in the collection of Francisco Marques dos Santos at Petrópolis. They represent the old town of Vila Real da Praia Grande, now known as Niteroi, which lies across the Bay of Guanabara from Rio.[33] In 1816 King John VI of Portugal during his twelve year residence in Brazil had visited the place and granted it a civic charter. This action served as an incentive for a considerable enlargement of the town.

One of these drawings is remarkable because it shows side by side the old town and the new one (Fig. 9). The former appears as a narrow strip hugging the shoreline of the Praia Grande or Great Beach, exactly as at such typical old Portuguese settlements as Macau in China or Maranhão and Rio de Janeiro itself in Brazil. The drawing shows the long narrow *terreiro* with the town hall and *pelourinho*, the irregularly planted houses, the church upon an island hill. The new town, on the other hand, is plotted behind in the form of a regular rectangle with streets, named for members of the royal family, intersecting at right angles. There are no squares, however. Instead, at the extremities of the rectangle, symmetrically disposed, are an area for stables and a market place with radiating avenues. In a separate place is a large public garden, which commemorates the king's visit, planted with beds of flowers tracing the royal name. It is significant that no effort was made to incorporate the administrative buildings or principal churches in the new area, which was to remain an exclusively residential and commercial district. The plan of the new town of Vila Real da Praia Grande was, therefore, a compromise arrangement, since it did not envisage the abandonment of the old settlement. In this respect it follows the pattern already created at Mariana.

In conclusion, we can summarize the history of colonial town planning in Latin America as follows: The Spanish employed throughout the period the rigid formula of the gridiron plan for all their settlements after 1523. These were generally made on level inland sites carefully chosen according to a code of rules incorporated in the Laws of the Indies. As a result the old cities of Spanish America were almost all alike except for a certain variation in the placing of the minor squares and an element of contrast provided occasionally by changes of terrain. There was a sameness about the streets of these cities with which we are well acquainted in this country because in the 19th century most of our cities were built in the same fashion. (This sameness in Spanish America has been intensified in recent times by a tendency to adopt the North American custom of numbered streets.) Broad and level thoroughfares provided easy communication throughout the town and until recently were entirely adequate to the volume of traffic. The colonnades and squares were an encouragement to commerce and to outdoor living. The gridiron system may have lacked originality but it did have these advantages. It also allowed practically unlimited expansion upon the same plan and provided a stamp of imperial uniformity to a whole colonial development. In Portuguese America, on the contrary, an opposite system almost exclusively prevailed. Settlements were made in rugged coastal areas. They developed without formal plans in strip formation at several levels, with narrow steep streets that rendered any communication difficult. The resulting plans are all different, disordered but picturesque.

It would then be difficult indeed to imagine two forms of urbanism more distinct than those that were employed in Portuguese and Spanish America. The one was a survival of medieval procedure which involved the repetition in America of the specific town plans of Portugal. The other, on the contrary, was a product of the Renaissance, which represented a most radical departure from the system that prevailed in the mother country. It was an early experiment in America that was to become almost universally accepted in the future.

UNIVERSITY OF PENNSYLVANIA

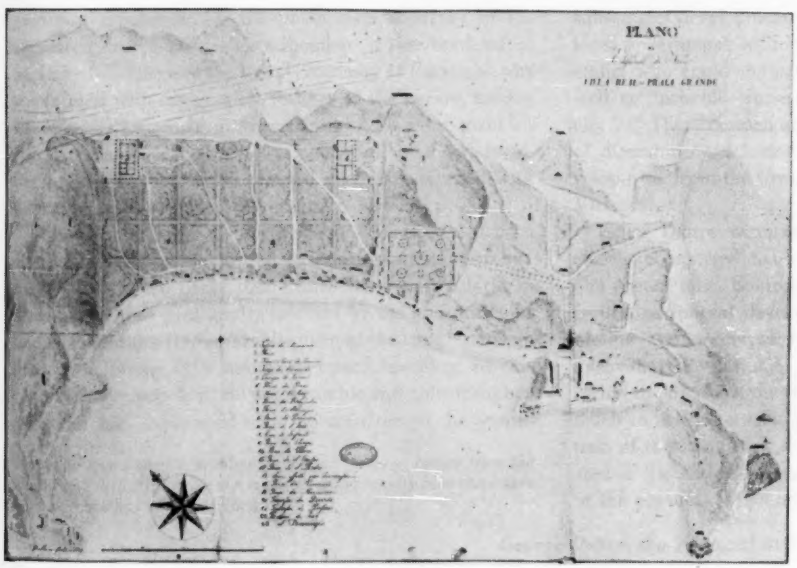


FIG. 9. Niteroi (formerly Vila Real da Praia Grande), Brazil. Plan of the town in 1819. (From the watercolor by A. J. Pallière, collection Francisco Marques dos Santos, Petrópolis)

This paper was read before a seminar of the Northeastern Council on Latin American and Inter-American Studies held at Brooklyn College, November 1954.

1. Excerpts from the code in English translation are published in Dan Stanislawski, "Early Spanish Town Planning in the New World," *Geographical Review*, XXXVII, 1 (1947), 94–105.
2. *Ibid.*, p. 95.
3. The plan is reproduced together with information about the early buildings in Diego Angulo, *Historia del arte hispano-americano* (Barcelona, 1945), I, Fig. 92.
4. *Ibid.*, p. 84.
5. Early Mexican town planning is discussed in detail in George Kubler, *The Sixteenth-Century Architecture of Mexico* (New Haven, 1948), I, Chap. II. The examples here cited, unless otherwise identified, are taken from this source.
6. Stanislawski, *op. cit.*, p. 96.
7. *Ibid.*, Fig. 1.
8. Pierre Lavedan, *Histoire de l'urbanisme: Antiquité et moyen-âge* (Paris, 1926), pp. 399–402.
9. Lavedan, *Histoire de l'urbanisme: Renaissance et temps modernes* (Paris, 1941), Fig. 206.
10. Kubler, *op. cit.*, Fig. 22.
11. *Ibid.*, Fig. 27.
12. For an old plan see Lavedan, *Renaissance et temps modernes*, Fig. 219.
13. R. C. Smith, *Arquitetura colonial bahiana* (Bahia, 1951), pp. 59–61.
14. Sérgio Buarque de Holanda, *Raizes do Brasil*, 2 ed. (Rio, 1948), Chap. 4; Smith, "Baroque Architecture in Brazil" in H. Livermore, *Portugal and Brazil* (Oxford, 1953), pp. 366–67.
15. Smith, "A Brazilian Merchants' Exchange," *Gazette des Beaux-Arts*, ser. VI, XXXVI (1949), 88–89.
16. *Some Years Travels into Africa and Asia the Great . . .* (London, 1638), p. 32.
17. *The Voyage of John Hughen van Linschoten* (London, 1885), I, 179.
18. *An Account of the Empire of China* in *Collection of Voyages and Travels* (London, 1732), I, 260–61.
19. Diary of Mrs. William H. Low, manuscript in the Division of Orientalia, Library of Congress.
20. Letter of E. J. Corrêa da Serra to John Vaughan, Lisbon Jan. 19, 1822, in the manuscript collection of the American Philosophical Society in Philadelphia.
21. Smith, "Some Views of Colonial Bahia," *Belas Artes*, ser. 2, I (1948), 34–40.
22. *Recopilação de notícias soteropolitanas* (Bahia, 1920), I, 91–92.
23. *Several Years Travel of a Gentleman through Portugal* (London, 1702), pp. 3–4.
24. *José Antônio Caldas, Notícia geral de toda esta capitania da Bahia*, ed. facsimilar (Bahia, 1951), frontispiece.
25. *Op. cit.*, I, 109.
26. *Compêndio histórico-político dos princípios da lavoura do Maranhão* (Paris, 1818), p. 113.
27. Ernani Silva Bruno, *História e tradições da cidade de S. Paulo* (Rio, 1953), I.
28. *Santuário mariano* (Lisboa, 1722), X, 7.
29. Vilhena, *op. cit.*, I, 91.
30. The plan of Ouro Preto is reproduced in Paulo F. Santos, *A arquitetura religiosa de Ouro Preto* (Rio, 1951) and Sylvio de Vasconcellos, *Arquitetura particular em Vila Rica* (Belo Horizonte, 1951).
31. For illustrations see Joaquim de Sousa Leão filho, "Palácio das Torres," *Revista do patrimônio histórico e artístico nacional*, X (1946), 135–168.
32. Lavedan, *Renaissance et temps modernes*, Fig. 215. An earlier example seems to exist at the town of Tomar, the headquarters of the Military Order of Christ, which may have been laid out by Prince Henry the Navigator when he served as Grand Master of the order between 1418 and 1430 (J. M. Santos Simões, *Tomar e a sua judiaria* [Tomar, 1943], p. 29).
33. Reproduced in F. Marques dos Santos, "O ambiente artístico fluminense à chegada da missão francesa em 1816," *Revista do patrimônio*, V (1941), 213–240.

GEORGE DANCE, THE YOUNGER, AS TOWN PLANNER (1768–1814)

MICHAEL HUGO-BRUNT

GEORGE DANCE, the Younger, was the son of George Dance, the Elder (1700–1768), Clerk of the City Works to the Corporation of London from 1734 to 1768 and an architect celebrated in his time as the designer of various London churches,[1] the Mansion House, and the old Fleet Market. The Dances were a remarkable family, and the elder Dance seems to have given considerable attention to the education of his sons. Nathaniel, an elder son, was the celebrated artist; William, the younger son, was a musician and founder-treasurer of the Royal Philharmonic Society, while the eldest son, James, was a celebrated but bad actor.[2]

Little is known of the younger George Dance's early life, but it is highly probable that he was educated at the Merchant Taylors' School as were his brothers. In 1754, at the age of 17, he joined his brother Nathaniel who was studying painting at Florence in Italy. He was a well educated man and has left a series of very interesting letters recording his experiences and thoughts at that time.[3] From these it is known that he travelled to Rome, Florence, Nettuno and Parma.

In 1762 he won the prize of the Royal Academy at Parma with a design for an art gallery.[4] He was an active and zealous student of the antiquities and at an early age he gained a reputation for the uncommon accuracy of his measured drawings.[5] Being a member of the Academy of St. Luke in Rome and the Royal Academy of Parma he was acquainted with the greatest Italians of the period, among whom was Piranesi from whom much of his subsequent inspiration can be traced.[6] He was also acquainted with members of the French Academy and may have worked with them in measuring Roman remains.

John Wood, the planner and architect of Bath, has been cited as playing an important part in his artistic development.[7] It is more likely that Dance was—particularly in his early years—profoundly affected by the antiquities he had seen and the Italian architecture of the time.[8] Later in life, after having fully assimilated such teaching, he discarded this eclecticism. He was a nimble and able draughtsman and was acquainted with the activities of the prominent architects of his day. He seems to have taken these new developments into consideration and integrated them with the city plans where possible as, for example, in the new Islington-Paddington road and the Foundling and the Bedford Estates.

In the light of the present research it would appear that the Dances (particularly George, the Younger) were largely responsible for changing the predominantly mediaeval character of London to Georgian. The City had suffered grievously from the ravages of the Great Fire. The elder Dance did little planning work for he was still concerned with post-Fire redevelopment and the provision and repair of housing for the population.[9] Planning opportunity, therefore, was lost in the confusion of leasehold tenure. When his son took office in 1768, London was on the road to recovery since it had been considerably affected by the changes in commercial and industrial technique throughout England. England was then the foremost nation in Europe and the wealth of the Americas and the East flowed to her. London, the primary centre of commerce, found her existing facilities, some of which had remained unchanged for hundreds of years, strained and tested to a degree that had never occurred before. This resulted in subsequent development with the election of a progressive local government willing to accept the ideas of any specialist who could indicate a generous financial return as well as "provide works of taste and adornment for the city."[10] The aldermen and sheriffs were, fortunately, men of discernment, a factor which saved much Georgian development from the dreariness and monotony of the later Victorian.

When Dance assumed office London consisted of a closely compacted mass with a high density occupying one square mile. Encircling the city were areas of uncontrolled peripheral development not subject to city jurisdiction and notorious from Elizabethan times for their unsavoury reputation.[11] The unwillingness of the Corporation to pull down the walls of the old City of London did much to accentuate the problems.[12] The innate conservatism of the Londoner, a remnant of mediaeval times, created a "walled-in" mental attitude which was reflected in the physical surroundings. When the walls of the City

MICHAEL HUGO-BRUNT, *architect and town planner, comes from the Union of South Africa. He is a member of the faculty of architecture of the University of Hong Kong.*

FIG. 1. Aerial map of London (1952) showing the projected or completed developments planned by George Dance, the Younger, during the period 1768–1812. (Author. Map by Aerofilms, London)

were removed it may be assumed that the commercial history of modern London began and that of mediaeval London came to its close. The Corporation up to then had attempted to restrict the size of the city by discouraging development outside the walls and disowning any individuals or concerns who moved outside its jurisdiction.[13] The uncontrolled development on the south bank and about the city was a direct result of this attitude. Eventually it became obvious to the Corporation that such limitation on development was strangling commerce which required space for growth and was, therefore, forced to seek alternative accommodation. London was overcrowded by the increasing flow of population seeking employment and additional revenues were being lost by settlement outside Corporation boundaries.[14]

There was consequently a considerable change in civic

policy and this assisted Dance, when Clerk of the City Works, in his planning (Fig. 1). He tried to encourage the growth of the city into areas under Corporation control, and to provide them with much-needed housing and accommodation; he planned and carried out new communications which allowed entrance and exit from the City to "Greater" London; he redeveloped existing areas of unfit housing and improved internal communications within the City itself. His first task on assuming office was the redevelopment of the Minories and Houndsditch, a bad area adjoining the City boundary, north of the Tower, which he rebuilt, planned and opened up with communications between 1768 and 1790. He undertook the large-scale development of Finsbury (1768–1812) an area north of London and provided housing for "Merchants and Artisans of the better sort" close enough to the City to be easily accessible which at the same time would relieve the acute housing shortage in its northern wards. This development cleared away a most unpleasant area[15] and provided a satisfactory entrance to the City from the New Islington-Paddington road. He commenced redevelopment in Southwark (Fig. 2)—an area under limited City jurisdiction—and emphasized the importance of the south bank to City development, a major contribution to the plan of present-day London. He planned the network of roads linking Westminster and Blackfriars and carried out development in St. George's Fields,[16] laying out what today would be termed a neighbourhood unit. He also attempted to integrate the Southwark and Lambeth developments by providing a good road link. These developments completely changed the character of the south bank and effected a very considerable improvement. Dance seems to have visualised Southwark developing in conjunction with London City, and most of his schemes would appear to have emphasized this. He realized the great possibility which it offered and he attemped to redevelop the area for housing part of the overspill population of London. He was, however, unable to change the semi-industrial character of Southwark to that of a residential area. He would have needed much stronger planning authority than he possessed to have accomplished this. Today the character of Southwark has changed and the London County Council would appear to contemplate an intensification of residential development, thus restoring the balance between residential and industrial development. Dance did produce plans indicating elemental commercial and residential zoning.[17]

South bank planning was not limited to these areas. The City controlled parts of Ratcliffe, Rotherhithe and Deptford, in all of which Dance carried out small scale redevelopments[18] although his major improvements were concentrated on the Port facilities.

Dance carried out redevelopment proposals in the City estates at Conduit Meade (1768–1812), shown in Figure 3, and Tottenham Court Road. These were situated in northwest London outside the City boundary. Conduit Meade was the oldest of the City estates and development had been undertaken there by the elder Dance. It is today that exclusive part of London bounded by Oxford Street on the north and Piccadilly on the south. Even in Dance's day it produced a high annual revenue. Generally speaking the inhabitants were the more well-to-do members of society who were employed by or attended the Court and Parliament.

Housing, therefore, varied considerably from magnificent mansions, e.g., Stratford Place,[19] to developments similar to those found in the worst parts of Clerkenwell. The rents were high and as a large section of the area had been developed Dance's task was limited to the construction of South Street, the development of South Moulton Row, and Albemarle and Dover Streets. He also attempted to

FIG. 2. London. Road layout, Southwark, including St. George's Fields (1768–71). (Courtesy Keeper of the Records, Guildhall Records Office, Corporation of the City of London. Redrawn Author)

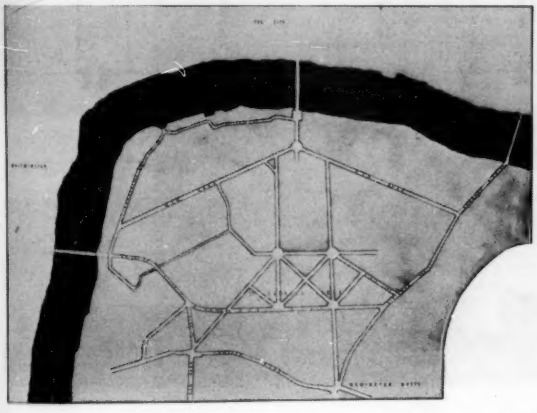
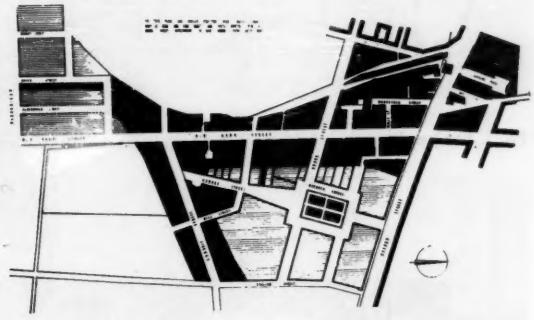


FIG. 3. London. Plan of Conduit Meade Estate of the Corporation of the City of London (1768–1814). (Courtesy Keeper of the Records, Guildhall Records Office, Corporation of the City of London. Redrawn Author)



open up the estate by providing wider and broader communications.

He was later responsible for the replanning of the City estates off Tottenham Court Road, viz., Alfred Place. Dance was familiar with the neighbourhood having been employed as a consultant by the Foundling Estate Governors.[20] He was acquainted with the designers of the neighbouring estates, particularly those of the Duke of Bedford, and as he lived in Gower Street he knew their problems at first hand. He developed Alfred Place as a type of monumental shopping centre for the northwestern estates and it ultimately became the heart of the shopping area still existing there today.[21] The proposals he made for the Earl of Camden relating to the development of Camden Town (1790) undoubtedly took the existing estate developments into consideration.[22] His contribution to estate development in northwest London should not be over emphasized, however, but merely regarded as an indication that he was actively aware of the planning developments of his contemporaries and that he attempted, whenever possible, to integrate them into the broader planning conception.

One of his most important contributions to present-day London was the reorganization of the communication system. Although land values were high and the City's resources were limited, he improved and reconstructed old streets or made new ones, e.g., Moorgate Street, London Wall and Thames Street. He executed minor alterations and adjustments to almost every existing city street which, although not important individually, when related to an overall planning development take on an immense significance. Dance developed the Temple Bar (1790–93) entry linking Westminster and the City and carried out the extensive improvement to the junction of Holborn and Snow Hill. He was responsible for the construction of a large new road (New Bridge Street) from Fleet Street to Blackfriars Bridge.[23] He carried out small civic designs for the Guildhall–Basinghall Street area, and the Honey Lane, Smithfield and Leadenhall Markets. He also replanned many small quays on the Thames.[24]

What should be realized, however, was the value of the many Dance proposals which were never carried out. Much of his existing development seems to be mean and relatively

FIG. 4. London. Plan of the projected Legal Quays. (From the *Third Report of the Select Committee of the House of Commons upon the Improvement of the Port of London*, 1796–1802. Courtesy Librarian, R. I. B. A.)

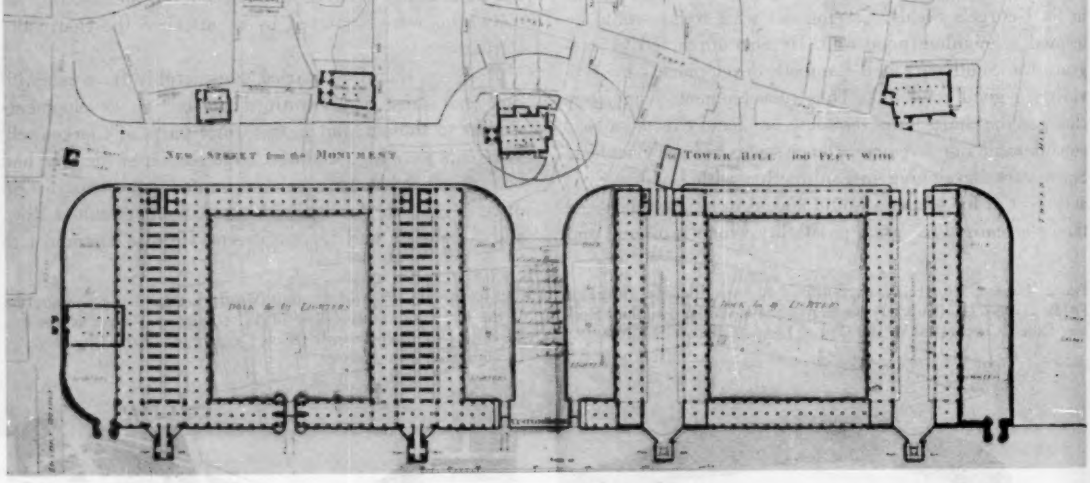
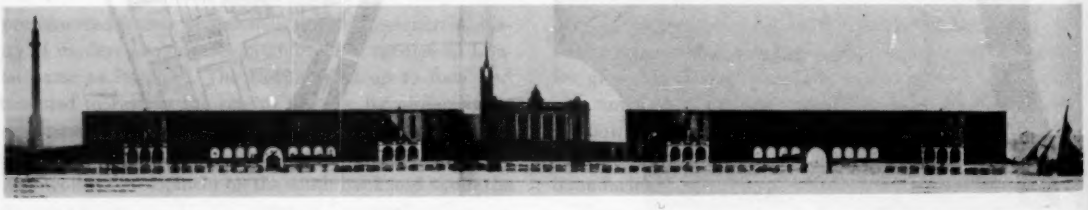


FIG. 5. London. Elevation of the projected Legal Quays. (*Third Report . . .*)

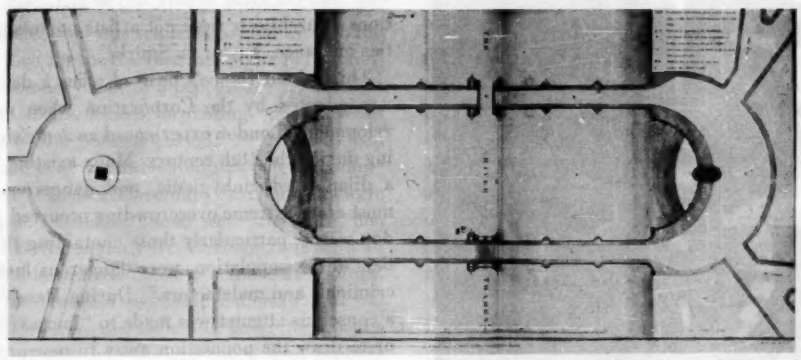


unimportant today but this was because the Corporation often refused to sanction major schemes of improvement between 1768 and 1812. Sometimes the lack of finance was responsible, but usually the Corporation members were unable to realize the projects in terms of future use, and would sanction certain aspects of the development only.[25] The most important of these projects was that for the improvement of the Port of London in which Dance visualised a development far ahead of his time. He realized that London could not expand efficiently unless the south bank of the Thames was developed and the City induced to "move across" the Thames. He also recognised the uselessness of attempting to keep the status quo by improving old facilities. His Legal Quays[26] project (Figs. 4, 5) was a compromise although an integral part of the development of a new Port of London. His proposals, worked out in collaboration with Jessop,[27] for spanning the Thames with a dual bridge (Fig. 6) in place of London Bridge and the provision of wet docks at St. Katherines, Rotherhithe and the Isle of Dogs was a practical solution to an intricate problem.[28] Even though his scheme was rejected and various other people planned the docks, the Bridge and the Legal Quays, many of his ideas were utilized. Look at a map of present day London and compare it with the Dance proposals. It will be found that there is little difference in the basic plan. Examine the Telford warehouses built at the docks and it will be seen that Dance's influence is most marked. His projected scheme for the Port of London, his proposals for the embankment of the Thames, and his attempts to define the circulations from the river-side, the south bank, and to and from the City, were problems in his day. Some of these he solved, some he only partially solved and others, unhappily the bulk of them, were carried through long after he had left the Corporation by his successors who based their schemes on his investigations.

When his projected schemes for St. George's Fields and Finsbury are examined, certain town-planning techniques —one might also say Dance trademarks—become apparent. In the first schemes submitted to committees, he provided almost complete neighbourhoods with their own services, markets, churches and shopping facilities. In Finsbury and St. George's Fields these are marked on the plans and are either distributed about the estate or grouped together in a central area. It cannot be said that he planned a "neighbourhood centre" although the germ of the idea was there, but he did make provision for services which were planned and did not grow haphazardly. In the architectural treatment of his buildings he was a master. He produced the simple, clean and straightforward solution not unlike much of the work done in our own day. He planned shops and houses which were sound economic propositions both in material and space. He imported the pleasant forms inaugurated by Wood at Bath, and Bernini and Angelo in Rome, and combined them in a way which is typically English. He accepted the ideas of John Gwynn and his father, many of whose proposals had a profound effect upon him.[29]

He was the first architect to introduce the crescent and the circus used in conjunction with the square to London, and he developed these forms throughout his career. In Finsbury and St. George's Fields he used the "Colosseum" idea on a large scale.[30] In 1768 he introduced the crescent and the circus in his plan of Southwark and Lambeth, e.g., St. George's Circus. Here for the first time the circus was used as a monumental form of crossing. In 1769 he used the crescent, the circus and the square in his development at the Minories (Fig. 7)—an adaptation on a small scale of the original Bath idea. This was succeeded by the Finsbury schemes of 1769, and his proposed scheme for the Earl of Camden at St. Pancras (the area now covered by Camden Town) which was designed in 1791 and reflected the Wood plans of Bath. The idea was never carried out in that form nor on that scale but if Finsbury and the later St. George's Fields schemes are examined it will be seen

FIG. 6. London. Plan of the projected double bridge to replace old London Bridge. (From the *Third Report of the Select Committee of the House of Commons upon the Improvement of the Port of London*, 1796–1802. Courtesy Librarian, R. I. B. A.)



that the influence of the Wood plans is obvious.[31] The only opportunity he had of using them in London on a large scale was at the Temple Bar entrance (Fig. 8) and in Jewin Crescent.

Although the flexibility of the Bath crescents is missed, when well sited these strong geometric shapes used in conjunction with each other are irresistible and powerful. The shapes themselves, however, are not of importance alone. While Dance experimented with symmetrical solutions—probably the result of his contact with France and Italy—he realized that an asymmetrical solution was so much more economical while equally effective. He was strongly influenced by function and soon developed a planning technique which lent itself more effectively to the every-day problems he was up against. He did indulge in symmetrical solutions on several occasions, e.g., Port of London Improvement and London Bridge.[32] He was often concerned about buildings of unique architectural and historical interest, and on three occasions he integrated them into his plans as dominants in the composition. In the Temple Bar improvement he placed St. Clement Dane's on an island in the centre of a circus.[33] He attempted the same solution for St. Paul's and was able to resist the impulse so many planners had before and after him to enter on the central axis of the Cathedral. He did not attempt to create a town pattern on paper but visualised the town as a series of separate three-dimensional perspectives to the spectator. He seems to have realized the danger of an inhuman scale and tried to relate his work to the inhabitant.[34]

He made a great contribution to civic design by his disregard of conventional ornaments. He designed façades and buildings which are simple and expressed themselves in their function and material.[35] Unlike many of the Georgian planners he did not employ external plasters and stucco on a large scale, and he expressed brick, stone and timber in elevation. He handled solid and void effectively, sometimes even sensationally, e.g., at Giltspur Street and Newgate Prisons, or the Chapel of All Hallows-by-the-Wall. He did fail in one respect—fortunately only in single buildings or private houses—and that was when he attempted to use the Gothic style of architecture.[36] He experimented with many styles and there can be little doubt that much of his private practice was experimental by nature.

Many of his Gothic buildings subsequently incurred the wrath of Pugin and Ruskin, but their value lies in their effect on his contemporaries. The architectural styles may have acquired much from the "Butterfield" of the Georgian Gothic! On the other hand, some experiments were successful: his prison designs[37] and his markets (particularly Honey Lane Market) foreshadow the work of the twentieth century. Nor did he confine his experimentation to aesthetic consideration alone, but was almost equally interested in structure and its fire-resistant qualities.[38]

His best "experiment" was possibly the 1774 Building Act (known as the "Black Act" in Victorian times). Its clauses controlled the whole fabric of London buildings; they enforced a standard in their erection and the materials used and tended to dictate ornamentation which led to the use of the standard wrought-iron trellis and grill. There can be no doubt that the Act resulted in a considerable improvement of conditions and made London a much safer city to live in. On the other hand, it resulted in the forerunners of the 1875 Bylaw street and produced monotony and drabness when handled by the unskilled architect. This was the great failure of the Act. Succeeding generations of architects were not artists possessing the capabilities of Dance, Taylor or Smirke.

Throughout Dance's term of office a definite procedure was adopted by the Corporation when undertaking developments. London experienced an acute shortage of housing during the 18th century. Many existing houses were in a dilapidated, unhygienic, and dangerous condition. In most areas extreme overcrowding occurred and many London wards, particularly those containing the poorer members of the population, were dangerous lurking places for criminals and malefactors.[39] During Dance's surveyorship a conscious attempt was made to "improve" such districts or to draw the population away to new areas of development, e.g., Finsbury.

FIG. 7. London. Plan of The Minories (*c.* 1790). (Author)

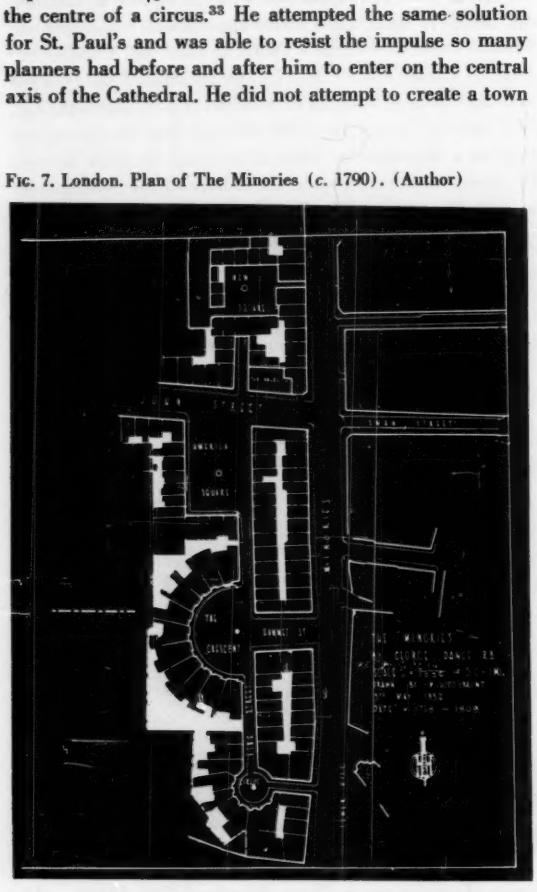


FIG. 8. London. Temple Bar. Elevation of houses, north side Strand circus (1802). (Courtesy Keeper of the Records, Guildhall Records Office, Corporation of the City of London)

Many estates controlled by the City were leased for 99 years from private individuals or public bodies, e.g., Finsbury. Most City properties were within the City boundary, but there were others outside, such as Conduit Meade. The City had leased land for development from mediaeval times in two distinct ways. The first of these was the Building Lease. When the Corporation undertook the development of an area the Clerk of the City Works would prepare plans and elevations.[40] These were submitted to the Committee[41] for investigation. After a scheme was accepted it was forwarded to the Court of Common Council for approval. In the case of isolated developments, however, (e.g., two small sites in a street), the Clerk was usually given direct authority to sanction improvement. Once authorization was obtained, the Clerk of Works would proceed to the site and peg the ground into convenient lots. These were then advertised for auction on a specified date. Upon completion of the auction, leases were granted and later ratified by the Court of Common Council. Such contracts followed a set form. The lessee undertook to erect a stipulated number of brick dwelling houses of the required rate[42] within a stipulated period of time, varying between one and four years (usually depending upon the locality of the development). The annual payment of rent was laid down and the lease was valid for 61 years. The lessee had the option of renewing the lease every fourteen years if he so desired. The building was to be erected in accordance with the plans and elevations of the Clerk of Works and any further drawings or sections he might make. It was subject to his approval and inspection and was required to comply with the conditions described for the relevant rate in the 1774 Building Act. A concessionary rent of a peppercorn for the first year was granted to the lessees, providing "they covered their roofs within a stipulated period."[43] It was hoped that this would act as an incentive to quick construction.[44]

A large number of these 18th-century developments were executed by "spec." builders. Some were fine craftsmen and tradesmen like the famous Dr. Barbone, but most of them were unreliable and attempted to achieve their objectives by using the cheapest available materials and unskilled labour. Many were the owners of large firms, while others consisted of two or three craftsmen who built in their spare time in hopes of realizing a handsome profit. On the whole, it would be fair to say that the supervision of the City architect and his staff did ensure a better development than was to be found outside the City boundaries at Spitalfields or Stepney.

The other method of development adopted by the Corporation was very much simpler. Many areas were developed by the Clerk of Works and his staff and contractors were employed directly. Such development was rare but was utilized in the erection of public buildings or when it became necessary to provide an initial stimulus in the development of an area, e.g., Blackfriars Bridge and Conduit Meade.[45] Normally, the Corporation was unwilling to undertake development because of the heavy initial outlay required. When it was unavoidable, they attempted to obtain State assistance in such undertakings. Most building, therefore, was undertaken by contractors working in their own interests, and it might generally be assumed that these developments occurred in the poorer areas where dwellings could be erected speedily and cheaply. In the wealthier areas of the City there was an improvement in the quality of building owing to the superior facilities which the larger contractors had and their ability to spread their profits over more units of housing; nevertheless, the structure of any Georgian speculative building was usually bad. Fortunately, there were improvements in technique. There was a widespread use of artificial stone (e.g., Coades or Strodels cement) and the mass-produced iron railing and balcony grill. This was applied to most standard ironwork, such as lamp fittings, hinges and locks.[46]

During Dance's term of office as Clerk of the City Works there was a marked tendency to simplify architectural design and dispense with ornamentation. Standardisation of plan and elevation was to be found in the Corporation designs, probably because this tended to reduce expense. There was little variation between the stipulated 2nd, 3rd and 4th rates of building. The 1774 Act resulted in safe categories of building and contractors were expected to comply with the requirements. Nevertheless, houses were not designed which consciously made allowance for zones of greater or lesser density, but seem to have been dictated by the wealth or poverty of an area. The more fortunate districts could afford to erect buildings of the 1st and 2nd classes, e.g., Stratford Place in Conduit Meade. The poorer

areas, which really needed building catering for dense populations, could only afford houses of the 3rd and 4th rate. These are naturally broad generalisations, but are applicable in most of the City estates. It is often possible to judge the conditions of an area, therefore, by the "rate" of building therein.

On the whole, City housing development had similar types of plan in most parts of the City, e.g., the Minories, Conduit Meade, Houndsditch, Finsbury, Alfred Place and Blackfriars. Nothing accurate exists for St. George's Fields or Southwark.

The effect of the industrial revolution, together with the laissez-faire policy advocated by the new industrialists, presented no small problem to the London Corporation during the 18th century. Fortunately, the Great Fire of 1666 had afforded industry and commerce breathing space in which to reorganize themselves. The geographical position and wealth of the City alone could not have saved her from the gradual decline which affected many of the once great cities of England. The members of the Corporation were keenly aware of the dangers which beset them and they were indeed fortunate in having their often hesitant and indefinite recommendations interpreted in terms of a defined planning policy by Dance and his staff. The 1787 plan for improvement (together with the other detailed projects) ensured the City a virile physical growth in keeping with the advances resulting from the increased industrialization and trade of England. Even today, after almost two hundred years, many of Dance's plan forms survive; the original street patterns are retained, as well as many of the original buildings. London is not a city which can afford to wax sentimental over its Bloomsburys or its Minories; when buildings become inefficient and antiquated they are demolished because the economy of London depends upon efficiency.

He assessed the problems which confronted him not only in terms of immediate use but also in the light of possible future requirements. When the Port of London and the Blackfriars Bridge projects were undertaken Dance seems to have realized that the opportunities which presented themselves might never occur again, and he tried to make full use of them.[47]

Sometimes he encountered difficulties from the aldermen and councillors, inadequate finance and incompetent administrators, and some of his projects were only carried out after his retirement.[48] He "controlled" London development long after he was gone and forgotten and was a more practical idealist than Wren, Evelyn or Gwynn, in that he had the opportunity of implementing his ideas. The Georgians were "planning" conscious and had a basic understanding of planning technique. The history of London during Dance's surveyorship does illustrate the advantages as well as the limitations of their planning. On the whole they were not "great" architects or planners as so many Georgian romantics would have one believe, but they did improve on what had existed before, and some of them were men of genius. The development of a broader planning outlook, a realization of the necessity for urban organization, together with an understanding of the aesthetic needs in civic design, were their major contributions to the English tradition.

While Dance emerges with no lesser renown as an architect, the main and important contribution of his life was to town planning. It is to be hoped, therefore, that more attention will also be paid to the planning activities of his contemporaries and his successors, namely, Mylne, Montague, Jessop, Smirke and Peacock.[49] The study of the work of civic officials seems to be neglected, particularly where the development of English cities is concerned, and it is not often realized that much of the building activity was carried out under their supervision and approval and, in many cases, to their designs.

Dance had a vision of a new London which was infinitely more practical and realistic than that of any of his contemporaries or predecessors. As a planner, he realised the value of his work to future generations[50] and many of his explanations to public bodies emphasize this; in doing this he was often sacrificing his own professional glory for his views were seldom appreciated. He often remained in the background and allowed others to take the limelight of his achievements.[51] His success (which was not entirely that of an artist-architect) rested upon his ability as an administrator working in harmony with his associates and it may be measured by the greatness of planning achievement in London during his surveyorship.

Dance seems to have indicated and, beyond the necessity of his duty, urged the aldermen to propose and consider alterations and improvements which he then planned and carried out.[52] While the Corporation of the City took the credit for such achievements, Dance's own generation have indicated the high regard in which he was held for them. He is described as "the first architect in England in respect of true taste and judgment" by the President of the Royal Academy, Benjamin West, and Burney said, "he has so much native genius that he would have been a distinguished man let him have pursued what he would."[53]

Dance was the prototype of the modern town-planning officer. His was an age of order, formality, and coherence. He broke established law of style and tradition, and endeavoured to lead the way to a more humane, sympathetic, and appreciative approach to town planning and architecture.[54] He was concerned with buildings for everyday people and seldom worked for a patron.[55] He had the foresight and sensitivity associated with all great artists, and within the limitations of his office he tried to design "works of taste and adornment."

Dance's contribution to English architecture is not only that of a town planner, for the architectural profession as

a body owes him a great deal. He was one of the first Royal Academician-Architects who attempted to define the professional position of the architect. He was, in addition to representing the architectural profession in the Royal Academy, a founder-member of the first architectural society in Britain.

He honoured his profession and was in turn honoured by it but he remained modest and humane, always believing that, "Architecture unshackled would afford the greatest genius the greatest opportunities of the human mind." [56]

UNIVERSITY OF HONG KONG

The author gratefully acknowledges the courtesy and assistance received from R. E. M. McCaugham, Department of Civic Design, University of Liverpool; the Keeper and Staff of the Records Office of the City of London; the Librarian and Staff of the Royal Institute of British Architects; the Librarian of the Royal Academy; the Trustees and John Summerson, Superintendent, of the Sir John Soane Museum; the Director and Staff of the National Portrait Gallery; and Messrs. Aerofilms, London.

In this paper many references are made to various development projects in London and its foreign estates (i.e., those estates owned by the Corporation of the City of London outside its boundaries) during the period of George Dance's Office as Clerk of the City Works, i.e., 1768–1814. These are recorded in documentary form in Journals and Estate Books available in the Guildhall Records Office of the City of London, Moorgate, here listed with abbreviations:

JCCC, The Journals of the Court of Common Council. There are 51 vols. having approximately 425 pages in each. They have subject indexes at the back and contain dated entries concerning the Council proceedings. This has been a most valuable and important source of information and has provided the major source for this paper. In each annual volume accounts are provided of developments in all the City estates although only the most important entries have been quoted. Little of this is available in printed form.

JCCL, The Journals of the Committee of City Lands, 1765–1814, 51 vols. The size of these varies from 350 to about 474 pages. They have subject indexes at the back and contain dated entries concerning the Committee proceedings, instructions and financial dealings. These give more detailed accounts of the city's transactions.

JBBC, The Journals of the Blackfriars Bridge Committee, 1768–1783, Vols. 1 to 4. Unfortunately, a number of these were destroyed in the Gordon Riots but those existing provide full details of the Committee's transactions, orders to officers, financial dealings and their acquisition of properties.

ABBHE, The Account Books of the Bridge House Estates, 1768–1812, 44 vols. These provide full details of the Estate transactions, orders to officers, financial dealings and the acquisition of properties.

ABFE, The Account Book of the Finsbury Estate, 1768–1814, 44 vols. These provide full details of the Estate transactions, orders to officers, financial dealings and the acquisition of properties.

MBBHC, The Minute Books of the Bridge House Committee, 1768–1812, 14 vols.

"The George Dance Journal," 1770–1782. This gives much information concerning the Surveyor's (Clerk of the City Works) Office, its administration, its staff and its expenses. It needs editing and indexing.

1. These included St. Luke's, Old Street and St. Leonard's, Shoreditch.

2. All the brothers are listed in the *DNB*.

3. The letters of Nathaniel and George Dance (the Younger). These were formerly in the possession of Mr. George Dance of Melbourne, Australia. They are not originals but copies of letters which have since disappeared. The author rediscovered them in 1952 and Mr. G. Dance presented them to the R.I.B.A. Library, Portland Place, London, in 1953. They cover the years 1752–1763.

4. "George Dance," *The Builder* (London), V (1847), 332–33.

5. John Soane, *Sir John Soane's Lectures on Architecture, 1809–1836*, ed. A. T. Bolton (Soane Museum Publication, London, 1929), pp. 53, 57, 65, 67.

6. Reginald Blomfield, "The Architect of Newgate," in *Studies in Architecture* (London, 1905), pp. 75–87; and also letter from Gio. Battista Piranesi to Robert Mylne, dated Rome, November 11, 1760, in the Library of the R.I.B.A.

7. John Summerson, "John Wood and the English Planning Tradition," in *Heavenly Mansions*, (London: Cresset Press, 1945).

8. Dance Letters.

9. He was the first city architect to commence serious large-scale development and reconstruction. He developed the Conduit Meade Estate.

10. JCCC, "Finsbury," Guildhall Records Office; London, Dec. 20, 1793.

11. E. Beresford Chancellor's *Pleasure Haunts of London during Four Centuries* (London: Constable, 1925) and *The Eighteenth Century in London* (London: Constable, 1920) are invaluable reference books. They contain innumerable descriptions of Southwark, Lambeth and Finsbury and their inhabitants.

12. They were ultimately demolished in 1760 and 1767. See *Johnson's England*, edited by A. S. Turberville (Oxford: Clarendon Press, 1952), I, 167. See also Rocque's (1746) Map of London (London Topographical Society, London, 1913).

13. *Johnson's England*, pp. 160, 196.

14. In Whitechapel, Westminster, Finsbury and Southwark.

15. JCCL and JCCC; ABFE, particularly the following entries: Jan. 3, 1767; Jan. 23, 1778 and Sept. 18, 1776; March 5, 1777; Jan. 12, 1780; March 17, 1790; March 25, 1790; Nov. 17, 1790; Feb. 23, 1793 and July 25, 1792.

16. A district celebrated from Elizabethan times as a vice and entertainment area. See M. Dorothy George, *London Life in the Eighteenth Century* (London: Kegan Paul, Trench, Trubner & Co., Ltd., 1925), pp. 82, 85, 348.

17. Several plans exist for St. George's Fields, two of which, drawn in 1809, indicate similar housing development. In both cases road development is the same, although there was great variety in the planning forms of the housing. The neighbourhood unit is consciously planned and has provision for poultry, flesh, hay and straw markets, and shops sited on the southeast corner of the Estate. Surveyor's Bridge House Plans 4, 5, and 5A, Large Plan Roll Nos. 10, 11 and 12, Guildhall Records Office, London.

18. MBBHC, particularly the entries dated Feb. 1, 1781, July 28, 1768, July 13, 1746 and Feb. 11, 1779.

19. Stratford Place was built and designed for Edward Stratford, Esq., by a Surveyor (whose name is not recorded in the records) on the site of the former Lord Mayor's Banqueting House. The Plan and Elevations were exhibited at the Royal Academy in 1771. The building was not designed by George Dance or his assistant James Peacock as has been alleged and the presence of their signatures on the existing copy of the drawing (now in the Dance Portfolios at the Guildhall Records Office) merely signifies the City's approval of the design. JCCL, "Conduit Meade," July 31, 1771.

20. Together with John Lewis he compiled a report on the progress of their development. This may be found in the Foundling Estate Archives. See John Summerson, *Georgian London* (London: Pleiades Books Ltd., 1945), pp. 151–152.

21. JCCL, "Tottenham Court Road," particularly those entries

dated March 19, 1807, October 6, 1808, March 1, 1808, October 27, 1808, May 31, 1809, June 21, 1809. Drawings may also be found in the Dance Portfolios, particularly Controller of City Lands Plan, (a) "The East Side of Tottenham Court Road," No. 370; (b) "Plan of the City's Estate at Tottenham Court Road, bounded by Bedford Street and Francis Street," Plan roll 3, No. 1316, dated 1796; (c) "Plan of the City's Estate at Tottenham Court Road," No. D1/R 14, 15, 16 and D BB/Por Ell.

A further drawing of Alfred Place, Elevation and Plan, exists in the Dance Cabinet, the Sir John Soane Museum, dated July 1, 1803.

22. An excellent evaluation of this can be found in *Heavenly Mansions*, chapter on "John Wood and the English Planning Tradition" and Fig. 8.

23. This was but part of a plan for improvement he had in mind which was never implemented; see Controller of City Lands Plan, (a) "The intended alterations in St. George's Fields and the Borough," No. P.D. BB Portfolio E. 10, dated 1768; (b) Plan 7080, St. George's Fields, ABBHE, dated 1809; (c) Plan 7089, St. George's Fields, ABBHE, dated 1809, Nos. 4, 5, and 5A, Plan Roll No. 10, 11 and 12.

24. JCCC and JCCL. There are numerous relevant details in each of the annual volumes, the most important, however, may be found in the volumes for the years 1768, 1770, 1774, 1775, 1776, 1787, 1789, 1790, 1807 and 1809.

25. This occurred in the case of the Finsbury and Halliwell Estate, the St. George's Fields Bridge House Estate developments, the Temple Bar and Snow Hill improvements. In all cases the initial proposals (many of which are to be seen in drawing form in the Dance Portfolios) were modified considerably. This is also confirmed by the JCCC and JCCL.

26. As early as 1796 Dance was working on projects for the replacement and improvement of the Legal Quays (the customs wharf situated between London Bridge and the Tower of London on the north bank of the Thames) and Riverside Facilities. These official schemes culminated in his 1799 scheme. See *The Third Report of the Select Committee of the House of Commons upon the Improvement of the Port of London*, 1799, printed July 28, 1800. A copy of this may be found in the Library of the R.I.B.A.

27. William Jessop (1745–1814) was Consulting Engineer for the project.

28. The Corporation resisted any schemes for improvement to the Port facilities of London for almost 100 years. They were afraid that any attempt to move the position of the Legal Quays and the anchorage outside the London City boundaries would result in a loss of revenue. Dance's proposed scheme was a compromise because it retained the Legal Quays in their original position. Dance drew up three planning schemes altogether although only that of 1799 was finally submitted to Parliament. Two previous schemes were done in 1796 but were ultimately modified.

29. John Gwynn, *London and Westminster Improved* (London, 1768).

30. *Heavenly Mansions, loc. cit.*

31. See note 23 which lists the drawings.

32. See the drawings accompanying *The Third Report of the Select Committee of the House of Commons upon the Improvement of the Port of London.*

33. He seriously considered moving the church into a new position but decided against it because of the cost. See The Controller of City Lands Plans Nos. 338–341 including (a) "Plan of the proposed improvements for Temple Bar," dated November 5, 1790, No. BB/F 34; (b) "Plan of the City's intended improvements at Temple Bar," 1792, engraved by R. Metcalfe and Sons, City Road, No. BB/F 35.

34. In many of his drawings there are indications that he used a modulus. In domestic work he seldom exceeded three-storey building.

35. See his Finsbury elevations, Controller of City Lands Drawings, Dance Portfolio, Nos. 1166, 1167, 1168, 1169 (1769).

36. The best examples of his Gothic designs are to be found in the drawings, mainly from his private practice (in the Dance Cabinet and in the Guildhall).

37. The Newgate, Giltspur Street, Leadenhall and Smithfield Markets.

38. In his letters to Soane he discusses experiments relating to incombustible floors. Holland lent two houses for experiments, 5 and 19, Hans Place, in 1792–1793. Dance was fascinated by the subject of fire-proofing and never lost interest in it. See Arthur T. Bolton, *The Portrait of Sir John Soane in Letters of his Friends* (Soane Museum Publication, London, 1927).

39. For a vivid picture of conditions see M. Dorothy George, *op. cit.*, pp. 140, 103–7, 90, 115–116, 256–259.

40. Usually one elevation only, that facing on the main street.

41. Normally the Committee of City Lands, although sometimes sub-committees were appointed to administer certain developments, e.g., The Blackfriars Bridge Committee.

42. As laid down in the Building Act of 1774. See O. Ruffhead, *The Statutes at Large—the 1774 Building Act* (London, 1809), Vol. 1774–76, pp. 336, 337.

43. This occurs frequently in the City Records. A good, typical example occurs in the JCCC for 1809 (See Tottenham Court Road, June 21), when three lots were leased to James Smith in the North Crescent of Alfred Place on a 99-year lease. The annual rent being £16.11.6 and a concession of a peppercorn rent for the first year providing he covered his building within a year.

44. It invariably led to much bad craftsmanship and faulty construction as well as speeding the building erections. A good example is to be seen in the development of Finsbury Square. See Dance's "Report on North East Corner of Finsbury Square," JCCC, 1790, dated October 28; or JCCL, 1792, when a house collapsed "On the South Side of the New Square," dated February 1.

45. JCCL, "Conduit Meade," June 18, 1735 and February 13, 1767; "Blackfriars," Dec. 14, 1768 and May 31, 1786.

46. John Summerson, *Georgian London* (London: Pleiades Press, 1945), p. 107; Donald Pilcher, *The Regency Style* (London: Batsford, 1945), pp. 50, 57–60.

47. See Dance's report to the Committee on "The Making of a new Street from Bridge Street to Broadway, Blackfriars, in a line which may hereafter be continued to St. Paul's Cathedral" in JBBC, October 22, 1783, in which he says, ". . . although it might never be opened all the way to the Cathedral, the present age will have the advantage and merit of setting the example to posterity of which ought to be done wherever practicable."

48. It should be realized that his successors, e.g., the Montague brothers, were in this office and were trained by him between 1768 and 1814.

49. All of them were associated with him on various projects and some succeeded him in office.

50. See Journals of the Bridge House Committee, October 22, 1783; also JCCL, November 14, 1767; also *The Report of the Select Committee on the Temple Bar—Snow Hill Improvement*, London, Dec. 20, 1793.

51. The Port of London improvements and the West Indian Docks are cases in point.

52. Alderman John Boydell seems to have been responsible in many cases. He was a firm friend; his famous Shakespearean gallery was designed by Dance in 1767.

53. Joseph Farington, *The Farington Diary* (London: James Greig, 1922–28), VIII (1802–1804), 218.

54. No attempt is made here to investigate his architectural work in any detail but he may rightly be regarded as a forerunner of the neo-Gothic style and the "father" of neo-Classicism in England. See John Summerson, "Soane, the Case History of a Personal Style," *R.I.B.A. Journal*, 58, No. 3 (January 1951), 83–91.

55. His patrons were the Earl of Camden (1714–1794), the Earl of Ashburnham, Lord Sherbourne, Sir George Beaumont (1753–1827), Sir Francis Baring, Mr. John Palmer (1742–1818) and Alderman John Boydell (1719–1804).

56. Dance, in conversation with Joseph Farington, March 25, 1804, Joseph Farington, *The Farington Diary*, VIII, 186.

URBAN REDEVELOPMENT IN THE NINETEENTH CENTURY: THE SQUARING OF CIRCLEVILLE

JOHN W. REPS

IN THE annals of American city planning there is no more curious and unusual episode than the planning and subsequent redevelopment of Circleville, Ohio. This is not, however, the story of one of the landmarks of American planning. Circleville was not a Philadelphia, a Washington, a Detroit, nor even a Williamsburg or an Annapolis. The plan of Circleville lies outside the mainstream of tradition in American town development. Its layout was neither influenced by nor was an influence on the form of other communities.

But if the effect of Circleville's planning was slight, the arresting and unique qualities of its layout and replanning are unmistakable. It was probably the only city in North America developed in a radio-concentric plan; it was probably the only city whose form was determined by earthworks constructed by aboriginal peoples; it was almost certainly the first example of comprehensive urban redevelopment in the United States. If these assertions seem remarkable they are amply sustained by the singular facts of Circleville's history.

The Ohio Legislature established Pickaway County in January, 1810, and in the following month three commissioners were appointed to select a site for the county seat. During the spring the commissioners investigated a number of sites within the boundaries of the newly established county. Their attention was soon drawn to a location on the Scioto River occupied by geometrical earthworks of a long-vanished Indian culture. This was but one of a series of similar relics scattered throughout the Ohio Valley—the remains of prehistoric Indians commonly referred to as the Mound Builders.

Certainly what the commissioners observed was one of the most interesting of the Mound Builders' accomplishments. The first complete scientific description was prepared by Caleb Atwater in 1820 and appeared in the first volume of the American Antiquarian Society's *Transactions*, from which Figure 1 and the following account are taken:

> There are two forts, one being an exact circle, the other an exact square. The former is surrounded by two walls, with a deep ditch between them. The latter is encompassed by one wall, without any ditch. The former was 69 rods in diameter, measuring from outside to outside of the circular outer wall; the latter is exactly 55 rods square measuring the same way. The walls of the circular fort were at least 20 feet in height, measuring from the bottom of the ditch . . .
>
> What surprized me, on measuring these forts, was the exact manner in which they had laid down their circle and square; so that after every effort, by the most careful survey, to detect some error in their measurement, we found that it was impossible, and that the measurement was much more correct, than it would have been, in all probability, had the present inhabitants undertaken to construct such a work.[1]

The commissioners decided that this would be the site of the new town and reported their decision to the authorities. While there is some evidence to indicate that the commissioners felt that this might serve to protect and perpetuate these curious survivals of a previous age, it seems as likely they were attracted to a site already cleared and leveled, and with ready-made protection against hostile attack. Whatever their motives, their decision was approved, and on July 25 Daniel Driesbach was appointed to buy the land and lay out a town.

The purchase of land was quickly arranged: two hundred acres were obtained from the owners for less than one thousand dollars. Driesbach was responsible for the survey of streets and lots which was soon completed. The first sales of land took place early in September, the new settlers immediately set to work building houses, and before the end of the year some forty families were living in the new community.[2]

Presumably it was Driesbach's decision to adapt the street pattern to the shape of the circular enclosure. His plan of Circleville—the name, of course, followed inevitably—was probably unique in this country. While one is inclined to give most credit to some unknown tribal chief or priest, some honor must surely go to Driesbach for realizing the potentialities of the peculiar site.

JOHN W. REPS *teaches city and regional planning in the Cornell University College of Architecture.*

The original plan of streets and lots is shown in Figure 2.[3] The circular portion is actually a double octagon, a pattern probably selected so that all property boundaries would be straight lines. In the center of the town Driesbach set aside a circular open space approximately four hundred feet in diameter. This was soon occupied by the courthouse, an octagonal structure each side of which faced a radial street extending to Circle Street, which followed the outer limits of the original earthworks. Between the central open space and the outer circle was another circular street named Circle Alley. The courthouse and the lots extending to Circle Alley appear in Figure 3.[4] The four cardinal streets leading from the courthouse connected the circular portion of the city with four streets enclosing a square approximately fifteen hundred feet on each side.

A view of the town as it existed in 1836 is shown in Figure 4. Although we are told it was the work of an artist who "never had any instruction, and but very little practice, in drawing and painting," it is probably a generally accurate representation of the old portion of Circleville.[5] A comparison of this view with the original plat reveals a number of changes. In the southwestern quadrant the radial street had been extended beyond Circle Street, and a new radial had been created between Circle Alley and Scioto Street. At the western entrance to the circular portion of the town a market building had been erected in the middle of Circle Street. There had been changes, too, in the layout of many of the alleys.

Two of the triangular plots beyond the termination of the radial streets were given over, at least in part, for public use. In the southeastern quadrant the county jail and sheriff's house had been located. The school and academy had been built in the northeastern section. Portions of the ditch which had been part of the original Indian site were still to be seen.

Certainly nothing quite like this town had ever been built in America. As events turned out, its unique plan was soon to disappear. James Silk Buckingham, the tireless English traveller and lecturer, visited Circleville in 1840 and recorded the changes then taking place:

> So little veneration . . . have the Americans for ancient remains, and so entirely destitute do they appear to be, as a nation, of any antiquarian taste, that this interesting spot of Circleville, is soon likely to lose all trace of its original peculiarities. The centre of the town contained, as its first building, an octagonal edifice . . . and the streets beyond this were laid out in a circular shape . . . But though the octagonal building still remains, the circular streets are fast giving way, to make room for straight ones; and the central edifice itself is already destined to be removed, to give place to stores and dwellings; so that in half a century, or less, there will be no vestige left of that peculiarity which gave the place its name, and which constituted the most perfect and therefore the most interesting work in antiquity of its class in the country.[6]

What caused the abandonment of Circleville's distinctive plan? Why were these changes made? Local historians have commented on some of the dissatisfactions with the original plan expressed by the residents of the town:

> Various objections were made. Some thought that the original design was a piece of childish sentimentalism; others that the shape of the lots were awkward and inconvenient; and others still that the open circular space about the court house became a nuisance in being used by people from the country as a hitching and feeding place for their teams; thus attracting to the same center the hogs and other domestic animals which were allowed 'the freedom of the city,' and making the Pickaway seat of justice a rather poor gem in a worse setting.[7]

There were other arguments as well, as the same source points out. The craze for land speculation and real-estate development, which was to become the dominent force of nineteenth-century town building, also affected Circleville:

> It is not at all probable that any change in the town plat would ever have been made, if it had not occured to somebody that by laying out the circular portion in a square form, several acres of waste ground—in the center of the circle, in the four angles where the square portion joined upon the circle, and in some of the avenues and alleys—would become available for building lots, and yield a fair profit over and above what the county would charge for it.[8]

In 1837 the first steps were taken by persons seeking to change the town plan. The State Assembly was prevailed upon to pass enabling legislation to permit the replatting of Circleville. The Act was brief and to the point. The County Court was authorized to declare the circular portion of the original plat vacated and to establish a new street and lot layout on the application of real estate owners. One important condition was specified: all of the affected property owners had to give their consents before the redevelopment petition could be approved. The Act further authorized the County Commissioners to sell any county land in the vacated area.[9]

The difficulty of obtaining unanimous consent of land owners in the circular part of the town evidently proved insurmountable, for in the following year the Assembly liberalized the replatting statute so that "the owners of real estate in any part of the circular part of the town" could initiate the change.[10] The next day the Assembly also passed an act of incorporation creating what was no doubt the first private urban redevelopment company in the country. The name selected suggests that the company's founders were not without an appreciation of the humorous aspects of their proposed project. The first section of the act of incorporation contained these provisions:

> Be it enacted . . . that Thomas Huston, Edson B. Olds, and Andrew Huston, and their associates, be, and they are hereby constituted a body corporate and politic, with succession for the period of twenty years, by the name

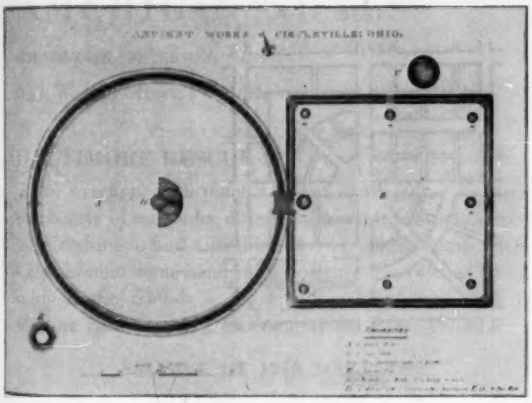
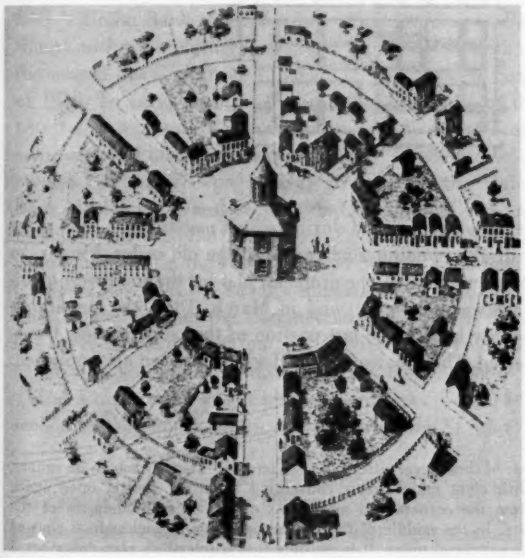


FIG. 1. The Indian mounds at the site of Circleville. (Caleb Atwater, "Description of the Antiquities Discovered in the State of Ohio," Pl. V. See note 1, *infra*)

FIG. 3. The central portion of Circleville, 1836. (See note 4)



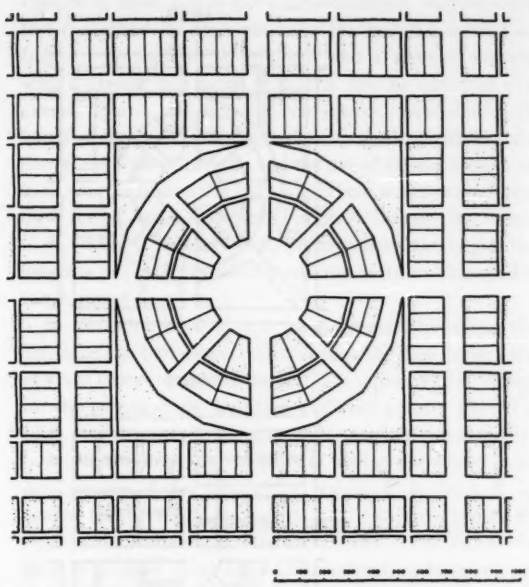
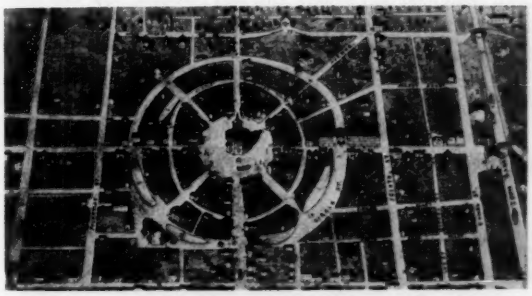


FIG. 2. The original layout of Circleville as platted in 1810. (Author. See note 3)

FIG. 4. Circleville in 1836, looking south. (See note 5)



and style of the "Circleville Squaring Company," for the purpose of effecting an alteration in the circular part of said town of Circleville; and . . . may purchase, sell, and convey real estate, within the limits of the said town of Circleville . . .[11]

As the revised legislation authorized, the Circleville Squaring Company proceeded with redevelopment of one segment of the circle at a time. The four stages of replatting are shown in Figure 5. The southeast quarter of the town was vacated by court order and replatted by the end of March. Next came the northwest quarter, replatted early in October. For each project the company paid seven hundred fifty dollars to the county for public land deeded to it.

The methods by which the company redeveloped these portions of the town are of interest.

Many of the lots were purchased out and out by the parties making the change, and then resold after it was made. Of the lots unsold, some were increased in size, and others diminished by the change; and the owners of the former made, and those of the latter received, suitable compensation.

The buildings fronting the streets or avenues which were to be vacated (and which, of course, made acute angles with the main streets), were either removed, torn down, or changed in position, so as to face the new streets.[12]

The dispatch with which the first two quadrants were redeveloped was not matched by subsequent action. For

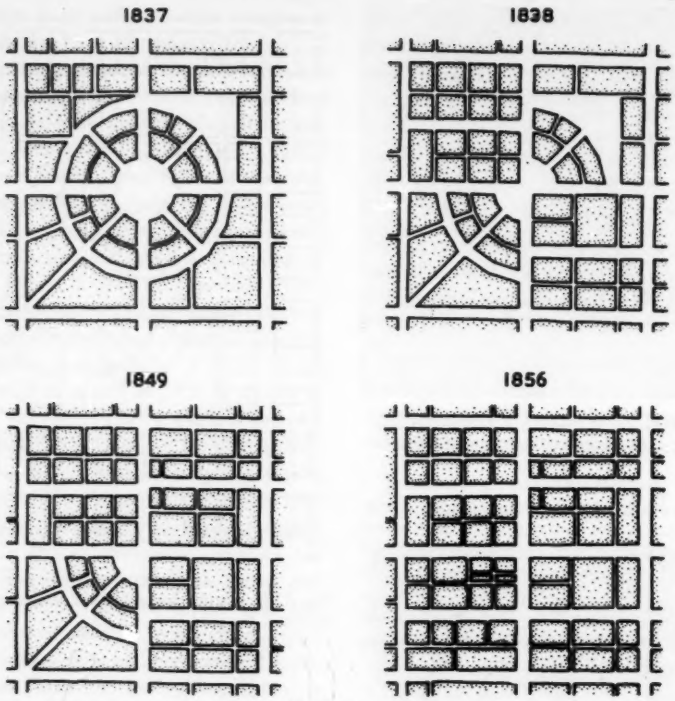


FIG. 5. The squaring of Circleville. (Author)

eleven years company activities were suspended while the town remained half square and half circular. One can imagine that the original plan was not without its supporters and these persons refused to sell their land to the redevelopment company, perhaps feeling that half a circle was better than none at all.

It was not until 1849 that the northeast quarter was replatted in conformity with the new plan. Then once again several years passed during which negotiations took place with the remaining adherents of the old order. Finally, in September, 1854, the proposed plat for the southwest quadrant was submitted, and in March, 1856, the remaining county land in the last portion of the old town was transferred. The squaring of Circleville had been accomplished.

CORNELL UNIVERSITY

1. Caleb Atwater, "Description of the Antiquities Discovered in the State of Ohio," American Antiquarian Society, *Transactions and Collections*, Vol. I (1820), pp. 141–45 and Pl. V. In this account the dimension of the circular fort is given as 69 feet in diameter. This obvious error was changed in the above quotation.

2. *History of Franklin and Pickaway Counties, Ohio.* Published by Williams Brothers, 1880, p. 179.

3. Figure 2 is a redrawing by the author of a copy of the original town plat kindly furnished by Mr. Henry McCrady, Pickaway County Engineer.

4. Figure 3 is a reconstruction of the central portion of the City based on old drawings and property records. The author is indebted to Mr. M. E. Noggle of Circleville, who supplied a print of this drawing.

5. The view of Circleville in Figure 4 was drawn from memory in 1870 by G. F. Wittich, who arrived in the town in 1836. The reproduction shown here is a retouched and strengthened copy of the illustration on page 174 of the *History of Franklin and Pickaway Counties, Ohio.*

6. James Silk Buckingham, *The Eastern and Western States of America*, 1842, Vol. II, p. 351. In 1849 in his *National Evils and Practical Remedies* Buckingham proposed the creation of model industrial towns in Britain. The book contains a plan and view of one of these ideal cities called "Victoria." The city was to be square, with eight main streets converging toward a central open space from the corners and mid-points of the outer boundaries of the city. In the middle of the central open space Buckingham showed an octagonal tower. It is possible that Circleville's plan contributed to the details of this utopian proposal.

7. *History of Franklin and Pickaway Counties, Ohio,* pp. 179–80.

8. *Ibid.*, p. 180.

9. "An Act to Authorize an Alteration in the Town Plat of the Town of Circleville," *Acts of a Local Nature Passed at the First Session of the Thirty-Fifth General Assembly of the State of Ohio.* Approved March 29, 1837.

10. "An Act Supplementary to 'An Act to Authorize an Alteration in the Town Plat of the Town of Circleville, Passed March 29, 1837,'" *Acts of a Local Nature Passed at the First Session of the Thirty-Sixth General Assembly of the State of Ohio.* Approved March 1, 1838.

11. "An Act to Incorporate the Circleville Squaring Company," *Acts of a Local Nature Passed at the First Session of the Thirty-Sixth General Assembly of the State of Ohio.* Approved March 2, 1838.

12. *History of Franklin and Pickaway Counties, Ohio,* p. 180.

AMERICAN NOTES

CHARLES E. PETERSON, *Editor*
421 Walnut Street, Philadelphia 6

BALTIMORE RESCUE

As wreckers with pinch bar and skullcracker eat away the hearts of our older cities to park more automobiles, it is refreshing to find something saved from the dump trucks. Last summer some handsome sculpture was rescued by our wide-awake friends in Baltimore as described here by Wilbur Hunter, SAH, Director of the Peale Museum.

SALVAGE OF 1810 SCULPTURE

By Wilbur H. Hunter, Jr.
Director, The Peale Museum

A unique feature of Baltimore architecture in the first quarter of the 19th century was the use of sculptured bas relief decoration in the manner of Claude-Nicolas Ledoux by Maximilien Godefroy and Robert Cary Long, Sr. Long's Union Bank of 1807 was the first building in Baltimore to have sculptured reliefs as a part of the design; the second was Godefroy's Commercial and Farmers Bank of 1810. To carve their decorations they made use of the two Italian sculptors, Giovanni Andrei and Giuseppi Franzoni, who had been imported by Latrobe in 1806 to work on the Capitol. The pedimental group from the Union Bank, depicting the seal of Maryland flanked by Ceres and Poseidon, survived the demolition of the bank in 1859 and is now installed in the Peale Museum garden. I am happy to report now that the equally important arch and sculptured spandrel from the Commercial and Farmers Bank has survived the destruction of that building this summer and is now stored at the Maryland Historical Society.

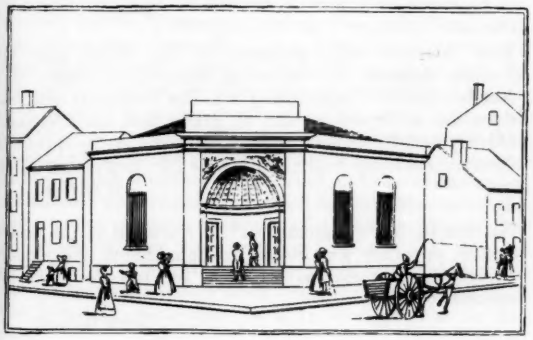
The Commercial and Farmers Bank was Godefroy's second commission in Baltimore, following the St. Mary's Chapel of 1806. It was not a large building, but the architect magnified its appearance by the use of a corner entrance with massive stone piers, and a sixteen-foot arch with a plaster half dome behind it. On the spandrel were carved figures of Mercury and Ceres, symbolizing the name of the bank. Although there is no documentary evidence, the style of carving and the use of the same light-red sandstone as is found in the Union Bank sculpture indicates the hand of either Andrei or Franzoni. Because the figures were gilded at an early date, perhaps from the beginning, they are in perfect condition and not worn or damaged in the slightest degree.

In mid-June of this year we suddenly discovered that the building had been sold and that the new owner was in great haste to convert the site into a parking lot. Except for the entrance, the building had been greatly altered in 1881 and few people thought of it as a historic structure. In any case, there was no hope of saving the whole building because of the commercial value of the land. It appeared that it would be only a matter of days before the work of the Italian sculptors was rubble. A committee was quickly formed from local architectural enthusiasts, and armed with photographs, photostats of old prints and historical information we approached a number of possible supporters and the owner. At the beginning we gained the help of Governor Theodore R. McKeldin who was particularly valuable in lending weight to the cause.

The owner, David Abrams, was immediately won over and generously renegotiated his contract with the wrecking firm at considerable expense so that we would have time to raise the estimated $3,000 for our purpose, and also so that we would have the authority to dictate procedure to the wrecker. Fund raising was complicated by the fact that many of the people upon whom we would ordinarily rely were on vacation and there was no time to spare. The first major problem was solved by William J. Casey, president of the Maryland Trust Company, but more important

Baltimore. (Right) Sculptured relief, entrance to the Commercial and Farmers Bank. (The Peale Museum)

Baltimore. The Commercial and Farmers Bank, 1810. Maximilien Godefroy, architect. (J. H. B. Latrobe, *Picture of Baltimore*, 1835)



for our project, also treasurer of the Municipal Art Society. Since the president of the society, Richard H. Howland, was in Greece at the time, Mr. Casey wired and telephoned other members of the executive committee and got authority to make a sufficient grant of money to see us through. The equally serious problem of a safe, long-term storage space was solved through the interest of John H. Scarff, F.A.I.A., and vice-president of the Maryland Historical Society, who obtained the use of the society's grounds.

The next step was mechanical, but nothing like this had been done in Baltimore within memory of man. A skilled stone mason agreed to make the attempt on a cost-plus contract but without any sort of a guarantee. It was decided to concentrate all effort on the arch and spandrel, since the plaster half-dome could not be moved and the stone piers and cornices could be easily and cheaply duplicated from samples in the future. Still there was six to eight tons of stone to be moved, and no one knew how it had been constructed or how many faults or flaws there might be in the old, soft sandstone.

In the end it was easier and cheaper than expected. The wrecker became extremely interested in the project and went out of his way to help. It turned out that the arch was in four parts and that the old lewis holes were quite strong enough for lifting purposes. By afternoon of the second day the operation was successfully completed at a cost of less than $2,000.

The importance of this project is enhanced by the recent unhappy fate of Antonio Capellano's terra cotta sculpture of 1819 on the Unitarian Church. Because of radical deterioration it was removed in fragments this summer and must be virtually replaced. The Union Bank sculpture is also in poor condition because of the seventy-year period of neglect between the demolition of the bank and the installation in the museum garden. In contrast, the sculpture from the Commercial and Farmers Bank is intact and remarkably sound—the best remaining example of architectural sculpture from the early 19th century in Baltimore.

NATCHEZ (CONTINUED)

Going back to American Notes in the JOURNAL for March 1955 we resume our Notes on Natchez.

PREFABRICATED HOUSE FRAME, 1790

We were pleased to find among the court records of the Spanish period particulars about a ready-cut house evidently floated down to Natchez-under-the-Hill from a sawmill in the cypress swamps across the river. This seems to have been the customary, though not always easy, method.

The following extracts from the court proceedings are revealing both as to the design of local frame houses and the contemporary names for their various structural members. In an earlier essay (*Gazette des Beaux-Arts*, January 1948, pp. 37–46) we reported that framed prefabs were made for North America as early as 1578 and the Louisiana French were shipping them to the West Indies in 1727.

Jeremiah Routh vs. *John Olivary*
(Natchez, Miss., Adams County Chancery Court Records, Spanish Record Book F, pages 240–243.)

To his Excellency Don Manuel Gayoso de Lemos Col: in his most Catholic Majesty's Service, and Civil and Military Governor of the Post and District of Natchez &ca. The Petition of Jeremiah Routh humbly sheweth. That your Petitioner did about twelve months ago bring to the landing the frame of a house forty feet square for sale, and when the river rose had it piled up near the back part of Mr. O'Connor's lot; the frame consisted of the following pieces vizt.

12 principal pieces	4 Cap plates
13 Joists	260 Laths
28 Studs	8 Braces
26 Sleepers for the Piazza	6 End Sills
4 Sills	12 Piazza posts
13 Sleepers for the house	52 Rafters

That a few days ago your Petitioner was informed that a certain John Olivary had appropriated the principal pieces of the said frame towards building a house for himself; that upon application to the said John Olivary for payment, he offered to pay me for the pieces of timber he had taken: which your Petitioner refused, as the remaining part of the frame was useless either to him or a purchaser; and insisted upon his paying for the whole; that if the said Jno. Olivary had any objections to the price affixed by your Petitioner, to leave it to any two men that were Judges of the value of timber and work; but he would not comply with the proposal. Your petitioner therefore most humbly prays your Excellency would be pleased to afford him such relief as you shall think proper; And your Petitioner as in duty bound shall ever pray. Government of Natchez 8th. March 1791.

Jere:Routh

Natchez 8th. March 1791. Let John Olivary be notified of the foregoing demand; and that he is answerable for the timber which he has in his possession.

Gayoso

To his Excellency the Governor. Your Petitioner has the honor to inform your Excellency that he has but fifteen pieces of the timber in question which were lent to him by the Patroon Molina. Natchez 9th. March 1791.

John Olivary

This Memorial being presented by Job Routh after his Fathers decease, the following decree was Issued vizt. Natchez the 11th. September 1794. The Petitioner will produce the evidences he has to prove that the aforesaid Olivary had the timber in possession: who are to appear at Government house next Saturday the 13th. September 1794.

Gayoso

Natchez the 11th. September 1794. Pursuant to the above decree, an order was Issued for John Short and Robert Creighton to appear as evidences for Job Routh at his request.

John Girault

Natchez the 13th. September 1794. Before me Don Manuel Gayoso de Lemos, Colonel of his Majesty's Armies and Civil and Military Governor of the Said Post and District, personally appeared Robert Creighton, who being duly sworn on the Holy Evengelists of Almighty God deposeth and saith, that he was employed by Jeremiah Routh to get the frame of a house with him, which was got and rafted down and placed close to Mrs. Baker's lot; that some time afterwards he saw two main sills, two walplates, eight posts and some braces of said frame put up in the House at the landing where the long Billiard Table was kept by a Spaniard whose name this deponent does not know, and further this Deponent saith not, but hath hereunto set his name with the undersigned Witnesses at the request of Robert Creighton.

John Girault

At the Post of Natchez on this seventeenth day of the month of December in the year one thousand seven hundred and ninety four, before me Don Manuel Gayoso de Lemos, Colonel in the Royal Armies and Civil and Military Commandant of the said Post and District, appeared Anthony Molina, who being duly sworn declared that the timber which he lent to John Olivary were fifteen pieces which he found adrift, in presence of divers persons; and that said Olivary gave him in exchange for the said timber a mare which he has still in possession and further the deponent said not, being thirty three years old; And the foregoing declaration being read to him he acknowledged the same, and has signed with myself and the Witnesses assisting.

Juan Girault....Antonio Molina

Natchez 17th. December 1794: Let Antonio Molina appear before me and declare the names of the Persons who were present when he caught the timber adrift.

Gayoso

Immediately thereupon the said Antonio Molina appeared before me, and being duly sworn, was required to name the persons who were present and saw him [p. 242] pick up the timber adrift and declared that Gabriel Blanco, Carpenter in the squadron of Gallies, and Francisco Fernandez, now in the Hospital are two of the persons whom he remembers to have been present when he took up the said Timber; and has signed with myself and the Witnesses assisting.

Antonio Molina....Juan Girault

In consequence of the foregoing declaration appeared before me and the Witnesses assisting, Fernando Fernandez, who being duly Sworn by God and the holy Cross to answer truly to such questions as should be put to him; he was asked if he had any knowledge of a quantity of timber belonging to Jeremiah Routh which lay at the landing of this town in the year 1790? Answer that he recollects that in the year 1790 the said Routh had a quantity of timber at the landing and that a high wind and rise of the water set the said Timber adrift, of which Antonio Molina caught some pieces opposite the house of Alexander Moore; but he cannot say how many and that he lent or sold them to John Olivary and further the Deponent cannot declare in the Matter, being twenty seven years old. And having read the foregoing declaration he acknowledged it to be the same that he had made; and has signed with myself and the Witnesses assisting.

Juan Girault....Franco. Fernandez

Next appeared Gabriel Blanco, Carpenter of the squadron of Gallies, who being duly sworn by God and the Holy Cross, in presence of the Witness assisting, to answer truly to such questions as should be put to him; he was asked if he had any knowledge of a quantity of timber at the landing of this Town in the year 1790 belonging to Jeremiah Routh? to which he answered that he remembers the said Routh had a quantity of Timber at the Landing in the year 1790, and that the rise of the water set the said Timber adrift; and that Antonio Molina caught some pieces with a pirogue, which he put in the yard of his house and afterwards sold or lent the said pieces to John Olivary; that several other persons were present at the time, but it is so long since that he remembers none of them except Francisco Fernandez; and further the Deponent cannot declare in the matter, being thirty two years of age; and having read the foregoing declaration, he acknowledged it to be the same that he had made, and has signed with myself and the Witnesses assisting.

Gabriel Blanco....Juan Girault

Natchez District vizt. The declaration of John Short concerning a house frame of timber the property of the late Jere:Routh. That March 8th. 1790 the late Jeremiah Routh gave the subscriber written orders to dispose of a house frame of timber being piled up together at this landing, just above John Olivary's Billiard Table house; some time after Mr. David Ferguson purchased this timber conditionally, that each Party should choose a Carpenter to estimate its value; just before this bargain was finished the subscriber noticing that some pieces of the timber were sawed called Mr. Lord a witness thereto, who observed that the whole frame of timber did not appear to be there, that some of it must be gone; Mr. Routh being sent for came down, and on examining his timber found a very considerable part [p. 243] of it wanting. Mr. Olivary was then building an addition to his house, extending it as wide again as it was before. Mr. Routh well knowing his timber, which he had sawed and squared himself, of particular dimension by contract, on search at Mr. Olivary's found a number of the largest pieces of his timber in Mr. Olivary's possession. Mr. Routh on this discovery claimed and proved his property; he presented a petition wherein he set forth the injustice done him by Mr. Olivary; but both parties soon after departed this life, which then prevented any further proceedings therein.

John Short

Before me Don Manuel Gayoso de Lemos, Colonel in the Royal Armies and Civil and Military Governor of the Natchez and its dependencies; Personally appeared John Short, who being duly sworn on the Holy Evangelists & Almighty God, deposeth that the above declaration is the truth. In consequence whereof he has herewith set his [signature] with me, in presence of Captain William Vousdan and Mr. John Girault witnesses present.

John Short....John Girault

To his Excellency the Governor. Job Routh with the most profound respect represents to your Excellency, that he

humbly conceives the foregoing proofs sufficient to establish his claim to the payment of the timber his late Father lost at the landing; as the taking of the pieces that Olivary made use of was the cause of the frame becoming useless, and being totally lost; wherefore the Petitioner begs your Excellency will be so kind as to order him the payment for the same out of the property of the said Olivary, according to the estimation that may be made by intelligent persons appointed by your Excellency for that purpose. Natchez the 10th. January 1794.

Job Routh

[end]

How the suit turned out does not appear in the record.

NATCHEZ IN 1797

At the close of the 18th century, Francis Bailey, an English traveller, came down the Mississippi and stopped at Natchez for several days. There he did some trading, slept at night with a pair of pistols under his pillow, and kept a diary. We quote here from description in his *Journal of a Tour in Unsettled Parts of North America in 1796 & 1797* (London, 1856) which volume now seems to be a very rare one:

Natchez . . . is situated upon a high hill, which terminates in a bluff at the river, and consists of about eighty or ninety houses scattered over a great space of land. The streets are laid out upon a regular plan; but there is so much ground between most of the houses, that it appears as if each dwelling was furnished with a plantation. . . . This district has been settled principally by English and Americans; and though the country was given up to the Spaniards in 1783, the proportion of Spanish inhabitants is very small. . . .

The houses are chiefly framed buildings; but, though this country has been settled so long, there is all that inattention to neatness, cleanliness, and the comforts attending thereon, that there is in a country just cleared. . . . I have [however] seen them fitted up in the neatest manner possible; but then in the greatest plainness. . . .

There are two or three places here which go under the denomination of taverns, and where you may get accommodated with board and lodging. I put up at one of them (at which there was a billiard table kept) and paid my landlord a dollar per day, which was enormous, considering the fare. . . . My bedroom opened immediately on the road. For you should bear in mind that the houses here are built somewhat after the Chinese style,—seldom more than a ground-floor, and the doors of most of the apartments opening from the street.

Incidentally, the land for the new town of Natchez-on-the-Hill was purchased by the government in 1789 and soon afterwards laid out with the typical Spanish colonial checkerboard pattern seen at St. Louis (1764), the newer Ste. Geneviève (*c.* 1785) and New Madrid (1789) on the upper Mississippi. Up until this time all of the town was "under-the-Hill." The latter site continued to be used by river men and was celebrated as a Sink of Iniquity by many writers, including Mark Twain.

BOOKS

PAUL F. NORTON, *Editor*

The Pennsylvania State University

James S. Ackerman, *The Cortile del Belvedere* (Vatican City: Biblioteca Apostolica Vaticana, 1954), 259 pp., 47 figs. and 3 folding plates.

This is the third volume of the great history of the Papal Palace of the Vatican which was commenced in 1933 by Cardinal Ehrle and Hermann Egger (*Studi e documenti per la storia del Palazzo Apostolico Vaticano*). Although those two eminent scholars have died, the volume by Professor Ackerman is a magnificent continuation of the series. The original plan was to devote each volume to an historical period of the palace, so the second volume was concerned with the palace until the mid-fifteenth century. This third volume differs from the original project in that it concentrates upon one section, the Cortile del Belvedere, and traces its creation and disintegration. As Professor Ackerman's study proves, however, the Cortile del Belvedere was the palace's greatest architectural feature and requires a volume to itself.

This book should be the exemplar for any architectural history devoted to a single monument. It reveals a masterful command of all the possible sources necessary for an accurate understanding and writing of the history of this building—literary descriptions, archival documents, drawings and other pictorial representations scattered throughout the museums, archives, and drawing cabinets of Europe—but it is much more than just documented history. The role of the Cortile del Belvedere in the development of Renaissance architecture is effectively analyzed. The style is succinct and very readable, and even the footnotes on occasion contain fascinating ideas. For example, in the note on page 140, three sentences suggest a comparison of Bramante's approach to antiquity with that of Ligorio's as paralleling the development in the theory of painting from Leonardo's "imitation" to the Mannerist *Idea*.

There are four basic parts in the text of this study. The Introduction briefly traces the history of the Vatican Palace through the expansive building project of Pope Julius II. The first chapter is then concerned with the reconstruction of Bramante's original project for the Cortile. This very detailed consideration is followed by ten chapters, some very short, treating the history of the building and revision of the court during the succeeding pontificates. The final chapter analyzes the style and sources of the Cortile. At the end three appendices present: (1) a set of contemporary literary descriptions of the court from 1509 to 1568, (2) the archival documents concerned with the building, and (3) a catalogue of architectural drawings and pictorial representations of the Cortile up to about 1583. For the general reader probably the introduction and last chapter will be the most interesting ones.

The Cortile del Belvedere was one of the most important creations of Renaissance architecture. Only the nearby great church of San Pietro in Vaticano excels the Cortile as an epitome of the development of Italian Renaissance architecture, and San Pietro does so only because its building campaign lasted well into the Baroque period. Almost all the important architects in Rome during the sixteenth century contributed to the Cortile; among the leaders are Bramante, Peruzzi, Antonio da Sangallo the Younger, Girolamo da Carpi, Pirro Ligorio, and Ottaviano Mascarino, with Giuliano da Sangallo, Raphael, Michelangelo, Vignola, and Martino Longhi involved to a lesser extent. The program for the Cortile also brought new types into Renaissance architecture since it "demanded the creation of the first architectural garden, the first permanent theatre, and the first museum building since antiquity." An even more fundamental contribution of the Cortile to the history of architecture is in its concept of space. "For the first time in Renaissance architecture the out-of-doors became an element in architectural thought." In true Renaissance fashion the whole complex of the Cortile rationalizes nature and proclaims the sixteenth-, and even seventeenth-century, attitude toward nature. The author very ably demonstrates

how the court was conceived in the Renaissance system of perspective with the spectator viewing it objectively from a station-point outside of the confined space, that is, from the windows of the Papal Apartment in the Stanze of Raphael.

As the stylistic conception of the Cortile is a perfect reflection of Renaissance aesthetics, so its content is a subtle exposition of Julius II's image of the position of the Papacy. The Belvedere Court of the Vatican reflects the ancient Hippodrome of the Palace of the Roman Emperors on the Palatine, as the new bank of loggias commenced at the Vatican by Bramante, now part of the Cortile di San Damaso, mirrors the Septizonium on the Palatine. So for the Renaissance mind the architectural parallel between the ancient imperial palace and the contemporary papal palace could only suggest the belief of Julius II that he was the new Caesar, the inheritor of both the temporal and religious power of the ancient emperors in Italy.

After a careful study of this book accompanied by great admiration for both the industry and ideas of its author, I can find only two very small points with which I cannot agree. These are such minor elements that they appear only as a few sentences in the whole book. Professor Ackerman quite rightfully indicates (p. 90) that the building records for the Cortile degli Archivi at the west of the Nicchione commence only late in 1565, and he, therefore, dates the beginning of this work at that time. However, old photographs preserved in the Vatican photographic archives (neg. nos. XIII.7.10 and XXXI.65.33), showing remnants of the Cortile degli Archivi left from the eighteenth-century destruction of that section and before the recent revision of the entrance to the Papal Museums, reveal a papal coat-of-arms of Pius IV with the date 1563 (one photograph is published, but not very clearly, in C. Cecchelli, *Il Vaticano* [Milan and Rome, n.d.], opp. p. 41). I hope at some later time to be able to prove that the date of the coat-of-arms is correct, and that in this case the documents are misleading.

Perhaps a slightly more important difference is in respect to the date when Pirro Ligorio ceases to be architect of the Fabbrica of the Vatican Palace. Professor Ackerman claims that Ligorio was retained "as director of the Fabbrica until [his] departure from Rome sometime after 1569" (p. 98), and submits as proof a document of April 27, 1569, of payment to Ligorio as "architetto di N. S." However, Ligorio, although remaining in Rome during part of the spring of 1569, was already in the employ of the Duke of Ferrara as an archaeologist from December 1, 1568 (Modena, Archivio di Stato, Camera Ducale, Bolletta Salariati, Vol. del 1569, Provisionati, f. 141). More important, the Mandati Camerale in the Archivio di Stato at Rome, which the author says (p. 150) he did not consult for the years 1564 to 1575, reveal that on November 26, 1567 (Mandati Camerale 920, f. 83v), Nanni di Baccio Bigio was paid 150 *scudi* to cover his monthly salary of twenty-five golden *scudi* as Palace Architect from June 1567. Nanni continued to receive this salary until his death, probably in August 1568. This amount constituted the usual salary of the chief Palace Architect and was the salary which Ligorio received throughout the pontificate of Pius IV, but of which there is no record in respect to Ligorio during the succeeding pontificate of Pius V. Further, another document, which Professor Ackerman very kindly pointed out to me in Rome in 1952 and which he mentions (p. 98, note 1), casts doubt upon Ligorio remaining as chief architect until 1569. On January 13, 1568, when Ligorio subscribed to the payment for work accomplished during the previous pontificate, he speaks of himself as "formerly of the Sacred Apostolic Palace under Pope Pius IV of happy memory" (ASR, Giustificazione di Tesoria 6, int. 18, f. 6r). Ligorio did work for Pope Pius V, such as the design of the Tomb of Paul IV, but I rather doubt that he remained as architect of the Fabbrica beyond June 1567. The payment in April 1569 is in connection with arrangements for the Feast of Corpus Christi, similar to a previous commission for Ligorio in 1563, but I do not think that it indicates that he also continued to supervise the building in the Vatican Palace.

The typographical layout and printing of this volume is in the usual impeccable style of Vatican Library publications. There are very few typographical errors and only two of these may confuse the reader. I am intrigued as to what was the author's original adjective which the printer reproduced as "firey volutes" (p. 23) to describe the volutes on the Bramante dome for the Torre Borgia. Also the caption to Figure 30, a detail of Dupérac's map of Rome of 1577, by error repeats the date 1557 of Figure 29; the date is given correctly in the catalogue of pictorial representations.

In conclusion, any reader, I believe, can have only the highest praise for this book, but anyone who has ever read some of the other products of Professor Ackerman's scholarship will realize that this is only to be expected.

DAVID R. COFFIN
Princeton University

Harry M. and Margaret B. Tinkcom, Grant Miles Simon, *Historic Germantown From the Founding to the Early Part of the Nineteenth Century, a Survey of the German Township* (Philadelphia: The American Philosophical Society, 1955), 154 pp., illus. $5.00.

The nature of this book, Volume 39 of the Memoirs of the American Philosophical Society, is indicated in the two endpaper maps of Germantown Avenue and adjacent areas, from Stenton Park to Northwest Avenue—the course of the old Germantown Road. Upwards of 238 structures of the Colonial and Federal periods listed in the German Township Survey, undertaken in 1951 by the Germantown Historical Society, are identified and located on the maps. In the book itself about a third of these buildings—residences, churches, schools, shops, mills, one covered bridge—are described and illustrated with views and floor plans. Although it is presented as "a preliminary study" and is not concerned with detailed examination of individual structures many of which have been treated elsewhere, this report is, nevertheless, comprehensive enough to provide a systematic and factually accurate outline of what remains physically of the early community, once a very independent "little province" to the northwest of Philadelphia, now the Twenty-second Ward of the City itself.

If the first founders of Germantown, who arrived in October 1683, actually were Dutch Quakers, the character and name of the place soon were fixed by an influx of Rhinelanders that made this the preponderantly German center it remained until after the Revolution. By the middle of the 18th century Germantown also had become a favorite place of retreat from the city, where Philadelphians, much given to country living, had summer residences.

The architectural development is, of course, best seen in houses because of their numbers. Little remains of the early one-and-a-half-story type, so like the "Dutch" cottages of the Hudson Valley and northern New Jersey. Larger houses, often with pent roofs and other distinctive features, were the rule by the 1740's and 50's, when within little more than a decade the number of dwellings in the township was tripled. Increasing urbanization brought stylish design as seen in Cliveden and houses of the Federal period. From the beginning local stone was favored as a building material. There is reference to one early structure "built of framework filled with brick." Stenton, begun in 1728, is of brick, but the first brick residence in the town itself apparently was the post-Revolutionary Fromberger House on Market Square.

This, in essence, is the architectural picture that is rounded out in the book's 85 described examples and in a brief note by Grant Miles Simon, F. A. I. A., Harry M. and Margaret B. Tinkcom have provided a historical introduction and a most impressive bibliography. The volume is indexed.

H. E. DICKSON
The Pennsylvania State University

Arnold Whittick, *European Architecture in the Twentieth Century* (London: Crosby Lockwood & Son, Ltd., 1950, 1953), Vol. I, 249 pp., illus. 30 sh.; Vol. II, 271 pp., illus. 42 sh.

Mr. Whittick's volumes may well serve as an introductory textbook, or as a reference for those unacquainted with the development of architecture during the last fifty years. However, since the author is competing with studies of modern architecture by such authorities as Henry-Russell Hitchcock, Lewis Mumford, Nikolaus Pevsner and Bruno Zevi, whose works he quotes in his bibliography, it is hard to understand how he could be satisfied with the mere chronological enumeration of the best known architecture of this period. There is no guiding principle apparent in Whittick's compilation. The three

parts now published in the first two volumes contain the "Historical Background and the Early Years of the Century," "Transition from War to Peace," and "The Era of Functionalism 1924–1933." A final volume will extend the study through 1950.

The text does not gain coherence through its subdivision into heterogeneous categories. One is astonished to find in successive chapters topics such as Revivalism; Eclecticism; Iron Construction; Reinforced Concrete; Architecture and Social Progress—Nineteenth-century Housing; Tradition, Romanticism, Simplicity, and Originality—The Stockholm City Hall. Thus we find the attempt to describe specific chronological periods interrupted by chapters dedicated to specific materials or to individual buildings which the author considers outstanding.

A certain lack of discrimination appears in the selection of illustrations where well-known examples of modern architecture are juxtaposed without making the slightest attempt to sharpen our understanding by showing comparable problems. A statement such as the following: "the purpose of an industrial building is very much the product of our own industrial era, whereas the purpose of a church is a product of a spiritual life covering the period of Christianity. Other buildings lie between these . . ." helps us very little in understanding stylistic development. In addition, there are numerous factual mistakes; for example, Gropius' first factory is located in Alfeld, not Alfred an der Leine. And Whittick completely neglects the influence of American steel construction on European architecture. But these faults are minor. More discouraging is the complete lack of interpretation of specific aesthetic problems, and the author's failure to relate the general historical and sociological development to architecture. If one could rebel against the personal vision of an author, or disagree with his evaluations, this would be preferable to reading an allegedly objective narrative which results only in unimaginative dryness.

PAUL ZUCKER
Cooper Union

BOOKS RECEIVED

Harland Bartholomew, *Land Uses in American Cities* (Cambridge: Harvard University Press, 1955). $6.50.

Karl Lehmann, *Samothrace, A Guide to the Excavations and the Museum* (New York: New York University Press, 1955). $2.50.

Herbert Read, *The Grass Roots of Art* (New York: Wittenborn, 1955, revised). $2.50.

Emil Kaufmann, *Architecture in the Age of Reason* (Cambridge: Harvard University Press, 1955). $10.00.

Alan Gowans, *Church Architecture in New France* (New Brunswick: Rutgers University Press, 1955). $8.00.

LETTERS

Editor, *SAH* JOURNAL

Dear Sir:

This is, quite frankly, a plug for the Graphic History Society of America and its organ, *Eye to Eye*.

Paul Vanderbilt and his Society and its magazine are performing a notable service both to historians and architectural historians. The purpose of the Society and its magazine is to bring to light and to assist in the preservation of graphic materials of all sorts—pictures, in other words, woodcuts, etchings, water colors, photographs—which have some historic or artistic significance. The writer has himself seen two major collections of photographs moldering in their time-honored repositories, attics, and suspects that there are many others suffering the same treatment. The Graphic History Society seeks to preserve these significant collections and to inform potential users of them where they are to be found.

Historians in general and, it may well be, architectural historians, have been too little aware of the importance of pictorial documents. In many instances significant collections have either been kicked around or totally neglected.

The meaning of this is that we have not, even today, recognized the value of pictorial documents and the fault lies with the historians, men of language and of words. How much more, for example, does the last photograph of Abraham Lincoln say to us than a dozen pages of eloquent commentary! Well, the Graphic History Society hopes to correct this little appreciation of graphic materials. To us, as architectural historians, the work of the Society is important because it strives to uncover, protect and make available to us pictures which are of vital significance to us in our work. Encumbered though we are with memberships in many things, we should support this very essential organization and its lively and informative magazine. Those wishing more information than I have been able to give concerning the Graphic History Society of America should write to Paul Vanderbilt, Executive Director, Graphic History Society of America, Inc., Madison, Wisconsin.

Yours sincerely,
Howard Dearstyne

Williamsburg, Virginia

SAH NEWS

THE ANNUAL MEETING

The annual meeting of the Society will be held on January 26–29, 1956, at Pittsburgh, Pennsylvania. Headquarters will be the Henry Clay Frick Art Department of the University of Pittsburgh. The sessions will be held jointly with those of the College Art Association.

RESEARCH CLEARING HOUSE

The Society has just reactivated its architectural history research clearing house. Anyone with work in progress is asked to report the area and contemplated title to Miss Phyllis A. Reinhardt, Department of the History of Art, Yale University, New Haven, Connecticut. Miss Reinhardt has generously undertaken to receive this material and publish periodic reports to be distributed with the JOURNAL. Questionnaires on research in progress will be sent out to the members with the Annual Book Award mailing.

DIRECTORS' MEETING

The regular fall meeting was held on November 3–5 at Richmond, Virginia. The meeting coincided with the organization meeting of the Virginia Chapter of the Society held at the Virginia Museum of Fine Arts with Leslie Cheek, Jr., presiding.

SAN FRANCISCO TOUR

On October 1 the Pacific Section, SAH, made a tour titled "A Century of San Francisco Architecture." Charles Pope, architect, was in charge.

MANUSCRIPT DEADLINE

Effective with the March 1956 issue material for the JOURNAL must be in the editors' hands by the fifteenth of the second month prior to the month of issue. The final deadline dates for the March, May, October and December issues thus become January 15, March 15, August 15 and October 15, respectively.